

Voyager

DIGITEX SERVER SOFTWARE

Your Central Brain for SHM

Acquire, manage, trigger, stream, and report—from one scalable, web-based hub.

Why Voyager

- One hub for all Sentry devices; hundreds of channels in parallel.
- Robust Ring Buffer so events aren't missed.
- Multi-mode recording: manual, scheduled, triggered, continuous.
- Automated PDF reports and live web streaming.
- Device profiles & templates for fast, consistent deployments.
- Health dashboard & email/SMS admin alerts for uptime and status.
- Role-based access & audit logs to control changes and track who did what.

What makes it different

- Advanced triggering: Leveling, STA/LTA, Above/Below, OMA-ready.
- Full device/channel control (scales, filters, offsets, roles).
- Runs on xPlorer (on-prem) or as managed cloud.

Made for

Bridges • Dams • High-rises • Tunnels & pipelines • Mines/industry

How Voyager fits your SHM

- System backbone: configures devices, aligns time (GPS/DigiSync®), manages recording modes, and publishes streams.
- Data plane + control plane: one place for scales, filters, offsets, tagging, retention, and backups.
- Action loop: triggers → alarms (relays/SMS/email) → logs/reports → audit trail, all within the same workspace.
- Scales with you: single site to multi-corridor networks without re-architecting.



Manage your deployment

Access: Web UI (multi-user, roles).

Recording: Ring Buffer + manual/scheduled/triggered.

Triggers: Leveling, STA/LTA, Above/Below, OMA.

Reports: Automated PDFs (FFT/PSD/stats).

Formats: MiniSEED/ASCII; SeedLink/FTP options.

Admin: OTA updates, logs, dashboard, Super Admin.

Outcome snapshot

- Always-on continuity: Ring Buffer + event capture eliminates gaps during outages or handovers.
- Smarter alarms: multi-criteria triggers (Leveling, STA/LTA, Above/Below, OMA-ready) reduce false trips.
- Team visibility: live dashboards, role-based access, and automated PDFs keep stakeholders aligned.
- Lower OPEX: centralized configuration, OTA updates.

Your workflow with Digitex

- **Instrument:** add devices/nodes; apply profiles (scales/filters/time-sync).
- **Acquire:** set recording (continuous/scheduled/triggered); confirm Ring Buffer.
- **Analyze:** watch live charts/FFT/PSD; tag events; annotate notes.
- **Act:** configure alarms/notifications and recipients; auto-generate PDFs.
- **Operate&Scale:** monitor health/status; apply OTA updates;

CE • ISO • Calibration certificate

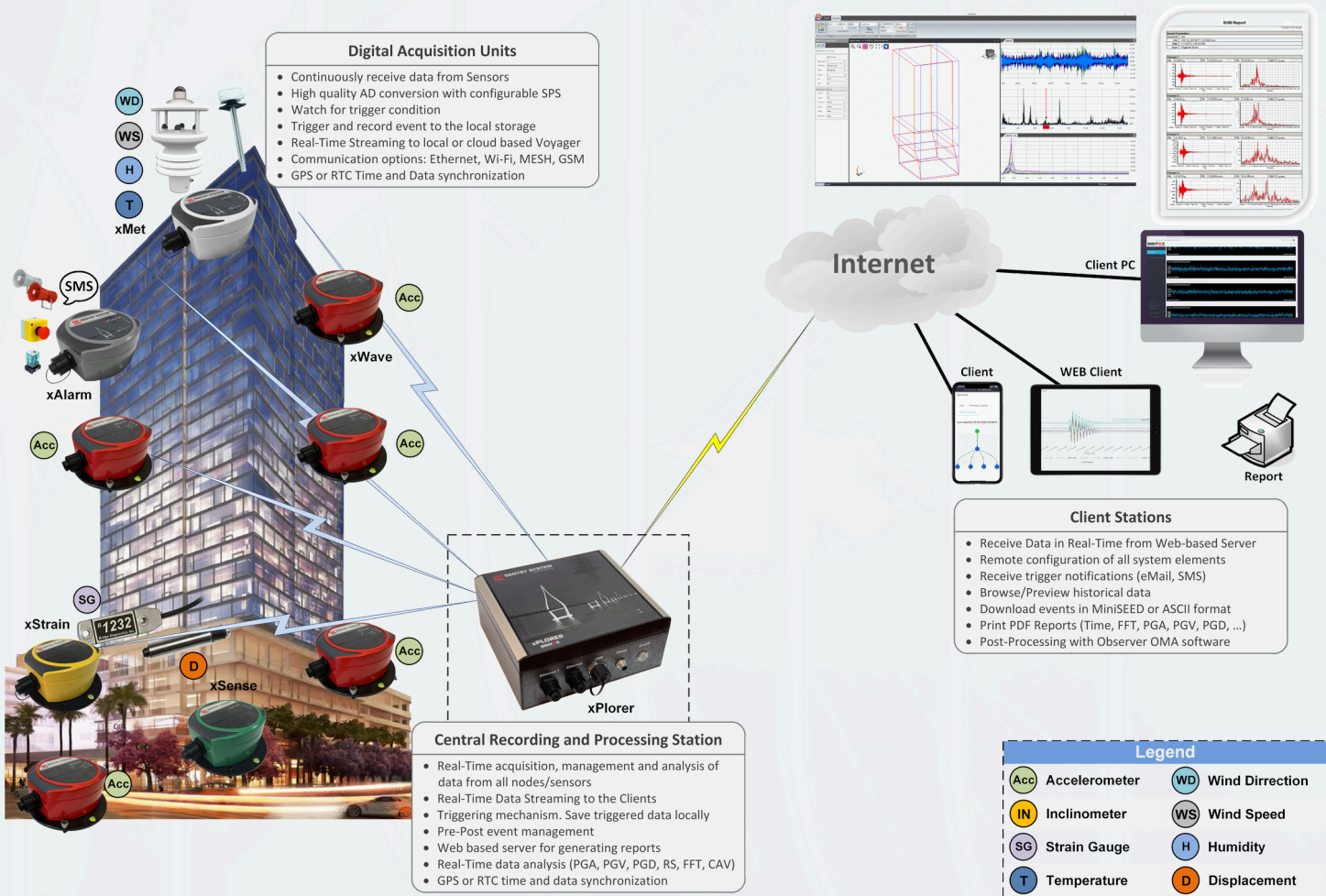
SHM SOFTWARE OVERVIEW

Digitex software is the intelligence layer of the Sentry System—turning raw sensor streams into reliable engineering insight. Built specifically for Structural Health Monitoring (SHM) and earthquake engineering, the suite covers the full lifecycle of a project: acquisition in the field, continuous storage and alerting, professional visualization, advanced analytics, and publishing of audit-ready reports.

Digitex SHM Software is a cohesive suite that acquires, manages, analyzes, and communicates structural data—from live streams to publishable results. Voyager serves as the central, web-based hub for configuration, time alignment, recording, alarms, and reporting. Nexus supervises real-time feeds on operator PCs, providing local recording and quick sanity checks. Vista opens measurement files for fast visualization, statistics, and conversions. Observer delivers advanced signal processing and Operational Modal Analysis with geometry-based 3D mode-shape visualization. Together, they turn raw measurements into synchronized, defensible insight with automated outputs for stakeholders.

SHM SOFTWARE MEMBERS

The SHM Software family consists of the following applications, which can be used individually or as part of a complete Digitex deployment: **Voyager** – server software for acquisition, device management, triggering, streaming, and automated reports; **Nexus** – SeedLink client for supervising live stations with local MiniSEED recording; **Vista** – data viewer and converter for plotting, statistics, filtering, FFT/PSD, and CSV/PNG export; **Observer** – analysis and OMA suite for FDD/EFDD/FSDD/SSI/PLSCF methods with 3D geometry and reporting.



Sentry System Real-time Monitoring

ABOUT DIGITEX

Digitex is a company specialized in design and development of real structural health monitoring systems for a variety of industries and applications including: bridges, tall buildings, campuses, windmills, oil rigs and more. Digitex's innovative solution for ambient vibration measurements and quick health assessment of structures is jointly developed and validated with our partners and advisors from the Universities. When properly configured, the Digitex system is capable of measuring and responding to both natural and man-made events such as: earthquakes, wind, explosions and accidental heavy impacts.