# CBRN-Analysis NG

CBRN-Analysis NG is an advanced, off-the-shelf CBRN Knowledge Management application that provides Hazard Prediction and Warning & Reporting (W&R) to support commanders and CBRN staffs with rapid and accurate decision support across planning, operations, and recovery.

Built on the NATO-proven calculation engine you already trust, CBRN-Analysis NG modernizes access through secure browser use, rapid deployment, and role-based interfaces that simplify the system, making it easier to use and quicker to onboard rotating personnel.

## Key benefits

- **Access anywhere, deploy instantly:** runs securely in modern web browsers (Edge/Chrome/Firefox) and is compatible with standard defence networks (air-gapped capable).

- **Role-based workflows:** the UI adapts to assigned roles, improving speed and clarity under pressure.

- **Improved security & auditability:** limit access to only what is operationally necessary, with centralised control via server-side access rights and versioning.

- **Battle-tested core:** supports CBRN 1-6 message generation, hazard prediction, and NATO W&R workflows based on ATP-45 logic.

## Core capabilities

- Hazard and contaminated area prediction for CBRN incidents, displayed as a clear map-based operational picture.

- **CBRN situational awareness & risk management:** identify areas/units at risk and support time-critical decisions to protect lives and assets.

- **"What-if" planning:** supports pre-emptive planning and risk assessment using defined risk objects and scenario analysis.

- **Briefing/report outputs:** generates structured briefing material to support command decision-making and rapid dissemination.

## Standards & interoperability

- Aligned with NATO W&R processes and calculations (ATP-45/AEP-45).

- Supports NATO messaging and symbology standards (ADatP-3 / APP-11 / APP-6) and can be configured for additional coalition standards as needed.

- **GIS & map services ready:** supports WMS-based map delivery and visualization from one or more map servers within the NG architecture.

- **Sensor-ready:** can be configured to consume CBRN sensor data via SCIM® where available.

## Technical & deployment summary

CBRN-Analysis NG consists of a server application and a browser client connected via a Local Area Network (LAN). The server performs calculations, stores the CBRN situation, and visualizes map data (WMS) from external map servers. The browser client is used for input, workflows, reporting, and visualization.

### Deployment models

- **Single computer (1 operator):** server + client on one computer; client runs locally in a browser.

- **Workstation (up to 4 operators):** server + client on workstation; up to three additional browser clients on networked computers.

- **Server (up to 10 operators):** server on dedicated server; up to ten browser clients. More secure posture: server can be physically protected; no data stored on clients.

## **Hardware** (recommended)

| | Server | Workstation | Single computer | Browser client |
|---|---|---|---|---|
| **CPU** | Intel i9 (14 cores / 28 threads) | Intel i9 (10 cores / 20 threads) | Intel i5 (6 cores / 6 threads) | - |
| **RAM** | 32 GB | 24 GB | 16 GB | 1 GB (used by browser) |
| **Disk** | +500 GB | +500 GB | +100 GB | - |
| **Network** | 1 Gbps | 1 Gbps | 1 Gbps | 1 Gbps |
| **Graphics (WebGL 2.0)** | - | NVIDIA (GeForce 400+)<br>AMD (Radeon HD 5000+)<br>Intel (HD 4000+) | NVIDIA (GeForce 400+)<br>AMD (Radeon HD 5000+)<br>Intel (HD 4000+) | NVIDIA (GeForce 400+)<br>AMD (Radeon HD 5000+)<br>Intel (HD 4000+) |
| **Monitor** | - | HD (1920 x 1080) | HD (1920 x 1080) | HD (1920 x 1080) |
| **Keyboard** | - | Any | Any | Any |
| **Mouse** | - | 2-button wheel | 2-button wheel | 2-button wheel |

## Software requirements & supported technologies

| | Server | Workstation | Single computer | Browser client |
|---|---|---|---|---|
| **Operating system (active support)** | Microsoft Windows Server 2016, 2019, 2022, 2025 | Microsoft Windows 11 Pro / Enterprise | Microsoft Windows 11 Pro / Enterprise | - |
| **Communication (out of the box)** | Shared folder; POP3/SMTP/ IMAP; NFFI/FFTS | Shared folder; POP3/SMTP/ IMAP; NFFI/FFTS | Shared folder; POP3/SMTP/ IMAP; NFFI/FFTS | - |
| **Formats** | APP-11; APP-6; NVG; KML; Microsoft Word | APP-11; APP-6; NVG; KML; Microsoft Word | APP-11; APP-6; NVG; KML; Microsoft Word | - |
| **Browser (latest version)** | - | Microsoft Edge; Google Chrome; Firefox | Microsoft Edge; Google Chrome; Firefox | Microsoft Edge; Google Chrome; Firefox |

## Optional configuration & related products

Optional extensions can be configured to meet national and operational requirements (examples): SCIM® sensor integration, GIS web services (WMS), CBRN COP publishing, NFFI, language support, and additional decision-support/ modelling options.

**SCIM®:** multi-sensor connectivity and information management; can provide sensor data to CBRN-Analysis workflows.

## Deployment models

• Delivery typically includes software, installation package, and operator documentation; licensing and optional modules are provided as contracted.

• CBRN-Analysis is an Export Controlled software application covered by category ML21.b.3 in EU directive 2014/108/EU.