

MemoryMonitorNMI – Virtual Memory Monitoring Tool

MemoryMonitorNMI automatically monitors a Windows PC's **virtual memory usage** and sends an **email alert** when usage stays above a threshold for a specified duration.

Designed for **NMI PC's, S&B engineers, and system monitoring automation.**

Features

- Monitors **virtual memory %** continuously
 - Sends **email alerts** when usage exceeds a threshold
 - Reads settings from **config.json** (no rebuild needed)
 - Shows a **tray icon** while running
 - Auto-starts on Windows login
 - Uses a **safe rotating log file**
 - Fully portable EXE (no installer required)
-

Folder Structure

MemoryMonitorNMI/

```
|—— MemoryMonitorNMI.exe      → Main application  
|—— config.json           → Configuration file  
|—— memorymonitor_icon.ico → Tray icon  
|—— INSTALL.bat          → Add to startup  
|—— UNINSTALL.bat        → Remove from startup  
└—— logs/                 → Log files
```

Installation

1. Place the folder anywhere (recommended: C:\Tools\MemoryMonitorNMI)
 2. Edit **config.json** if needed:
 - o threshold percentage
 - o duration
 - o SMTP email settings
 3. Run **INSTALL.bat**
 4. The app will:
 - o Launch immediately
 - o Add itself to Windows Startup
 - o Show a system tray icon
-

Email Alert Example

Includes:

- Hostname
 - Memory usage
 - Threshold
 - Duration exceeded
 - Timestamp
 - Top memory-consuming processes
-

Uninstall

Run **UNINSTALL.bat**.

This will:

- Stop the application
- Remove startup entries
- Remove support folders

Configuration (config.json)

Example:

```
json Copy code  
  
{  
    "monitor_settings": {  
        "check_interval_seconds": 10,  
        "threshold_percent": 90,  
        "required_duration_minutes": 30  
    },  
    "alert_settings": {  
        "enable_email_alerts": true,  
        "send_once_per_episode": true,  
        "include_top_processes": true,  
        "max_processes": 5  
    },  
    "email_settings": {  
        "smtp_server": "smtp.gmail.com",  
        "smtp_port": 587,  
        "use_tls": true,  
        "smtp_username": "your_email@gmail.com",  
        "smtp_password": "app_password",  
        "email_from": "your_email@gmail.com",  
        "email_to": ["recipient@example.com"],  
        "email_subject": "Memory Alert - [HOSTNAME]",  
        "email_prefix_text": "Automated memory alert:"  
    },  
    "logging": {  
        "log_enabled": true,  
        "log_directory": "logs",  
        "log_level": "INFO",  
        "max_log_size_mb": 5,  
        "backup_log_files": 3  
    }  
}
```

