**NVC 1.4.35 - Video Converter Documentation**

**Overview**

**NVC 1.4.35** is a **Video Converter Application** monitors source folders for video files. It automatically converts detected videos to user-defined output formats using **FFmpeg**. The application allows users to configure source, destination, and backup folders, set conversion preferences, and monitor conversion progress. Users can customize video and audio codecs, choose to delete original files after conversion, set a retention time for deletion, leverage GPU acceleration if available, and utilize additional features such as drag-and-drop.  
A screenshot of a computer

Description automatically generated

**Key Features**

* **Automated Conversion:**
  + Continuously monitors the source folder for new video files and converts them to the chosen output format in the destination folder.
* **Customizable Output Formats and Codecs:**
  + Supports the following formats - mp4, mov, avi, mkv, flv, webm, mpeg, mpg, 3gp, ogg, wmv, m4v, and mp3.
  + Allows selection of video and audio codecs based on the chosen output format.
* **GPU Acceleration:**
  + Detects available GPU encoders (e.g., NVIDIA NVENC, Intel QSV, AMD VCE/VCN) in the installed FFmpeg build.
  + Utilizes GPU acceleration for faster video encoding if supported.
* **Drag-and-Drop Support:**
  + Enables users to drag video files directly into the application window for immediate conversion.
* **Original File Management:**
  + Offers options to move original files to a backup folder, delete them after conversion, or retain them in the source folder.
  + Users can set a retention time (0-30 days) for delayed deletion of original files.
* **Copy Only Option:**
  + Provides the ability to copy files without converting them, facilitating easy file management.
* **Auto Run on Startup:**
  + Can be configured to automatically start monitoring and converting upon launching the application.
* **System Tray Integration:**
  + **Minimizes to the system tray**, allowing it to run unobtrusively in the background.
* **Logging:**
  + Implements detailed logging of conversion activities and errors, stored in a rotating log file.
  + **Log File Path:**

C:\Users\<Username>\AppData\Roaming\VideoConverterApp\conversion\_log.txt

* **Lock/Unlock Feature:**
  + Allows users to lock the application settings to prevent accidental changes.

**How to Use the Application**

1. **Select Source Folder**
   * Click the **"Source Folder"** button to choose the folder containing video files to be converted.
2. **Select Destination Folder**
   * Click the **"Destination Folder"** button to choose where the converted files will be saved.
3. **Select Backup Folder (Optional)**
   * Click the **"Backup Folder"** button to choose where original files will be moved after conversion if the **"Use Backup Folder"** option is enabled.
4. **Configure Settings**
   * Click on **"Settings"** in the menu to open the settings window.

**Settings Options:**

* + **Auto Run on Startup:**
    - Enable this option to automatically start monitoring and converting with the previous settings upon launching.
  + **Copy Only:**
    - Enable this option to copy files without converting them. This feature moves media files from one folder to another without altering their formats.
  + **Delete Files After Conversion:**
    - Enable this option to delete original files after conversion.
  + **Retention Time (Days):**
    - Set the number of days to retain original files before deletion (0-30).
    - Setting to 0 deletes files immediately after conversion.
  + **Use Backup Folder:**
    - Enable this option to move original files to the backup folder instead of deleting them.
    - Overrides the **"Delete After Conversion"** setting.
  + **Output Format:**
    - Select the desired output format (e.g., mp4, mov, avi, mkv, flv, webm, mp3).
    - The application automatically suggests compatible codecs based on the selected output format.
  + **Video Codec:**
    - Choose the video codec for conversion.
  + **Audio Codec:**
    - Choose the audio codec for conversion.
  + **Time Restriction Settings:**
    - **Start Time:** Set the time when the application is allowed to start conversions.
    - **End Time:** Set the time when the application should stop conversions.
    - **No Time Restrictions:** When enabled by default, the start and end time inputs are **grayed out** (disabled) to prevent editing.

1. **Run/Stop Conversion**
   * Press the **"Start Conversion"** button to start monitoring the source folder and converting files.
   * Press the button again to **stop** the process.
2. **Drag-and-Drop Conversion**
   * Drag video files directly into the application window for immediate conversion.
3. **Monitor Conversion Status**
   * View detailed logs and conversion status in the **console output** on the right side of the application window.
   * The **status indicator** at the bottom right shows whether the application is running or idle.
   * The application icon updates to indicate active conversions.
4. **Lock/Unlock Settings (Optional)**
   * Use the **"Lock"** option in the menu to prevent changes to settings and folders.
   * Confirm the action when prompted.
   * The **"Lock"** menu item toggles to **"Unlock"** when locked.
   * When locked, critical settings and folder selections are protected from modification.

**FFmpeg Integration**

FFmpeg is integrated into the application to handle video conversions.

* **Compiled Executable Users:**
  + If you are using the compiled executable version, FFmpeg is packaged with the application, and no additional download is necessary.
* **Python Script Users:**
  + If you are running the Python script directly, you need to have FFmpeg installed on your system.
  + You can download the required build of FFmpeg from the following link:
    - [Download FFmpeg](https://ffmpeg.org/download.html)

**Adding to Windows Startup**

To configure the application to launch automatically when Windows starts:

1. **Open the Startup Folder:**
   * Press **Win + R** to open the Run dialog.
   * Type shell:startup and press **Enter**.
2. **Create a Shortcut:**
   * Place a shortcut of the application's executable (.exe file) in the startup folder.
3. **Next Startup:**
   * The next time Windows starts, the Video Converter will launch automatically.

This application is written in Python. The source code is available on GitHub:

* **Video Converter Source Code:**
  + <https://github.com/ipaulbot/Video-converter>