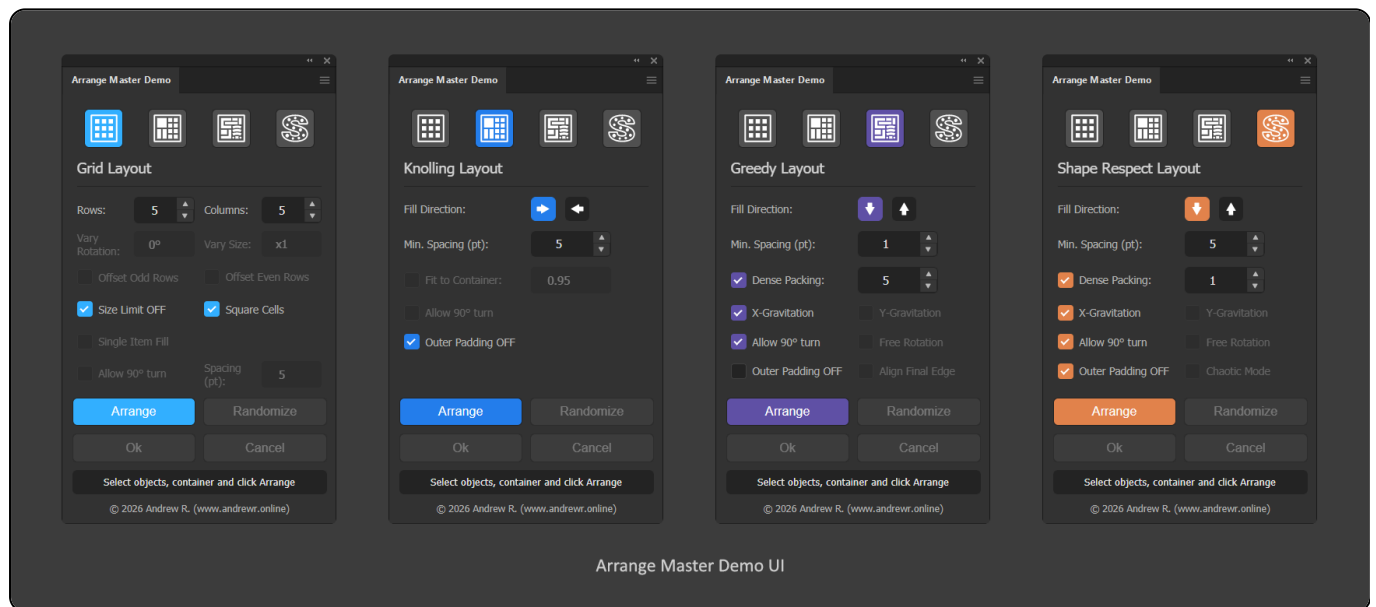


Arrange Master: Free Demo Version

The Purpose of the Demo

The Arrange Master Demo provides a hands-on trial of our True-Shape Nesting Plugin for Adobe Illustrator. Previously distributed as a basic JSX script, the demo is now a fully integrated CEP panel. It allows users to test the performance of the True-Shape Nesting algorithm, verify compatibility with complex prepress vector files, and understand the core session workflow.

Available Functionality



The demo provides access to four primary layout engines with restricted parameters:

- **Grid Layout:** Distributes objects into a structured grid. Controls for Rows, Columns, Size Limit OFF, and Square Cells (proportional centering) are active.
- **Knolling Layout:** Evaluates bounding boxes using the Maximal Empty Rectangles heuristic. Fill Direction, Min. Spacing, Allow 90° turn, and Outer Padding OFF are active.
- **Greedy Layout & Shape Respect:** Sequential placement algorithms. In the demo, you can control Fill Direction, Min. Spacing, Allow 90° turn, and toggle the Dense Packing mode.

⚠ Active Internet Connection Required

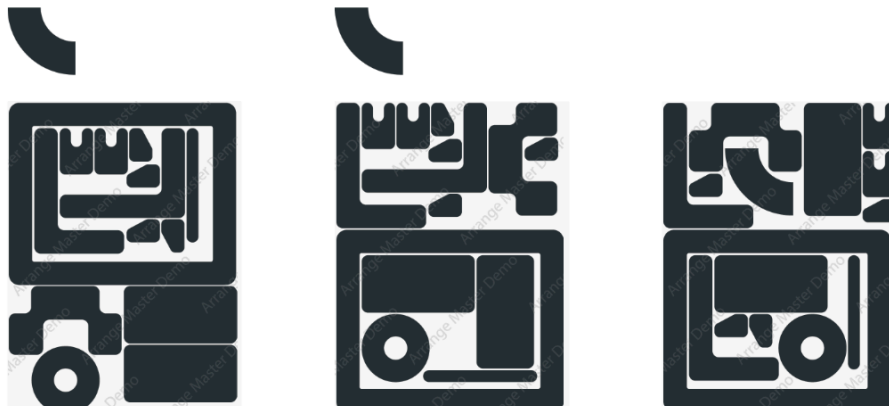
An active internet connection is mandatory to initialize the Arrange Master Demo.

Dense Packing & The Evolution Stepper

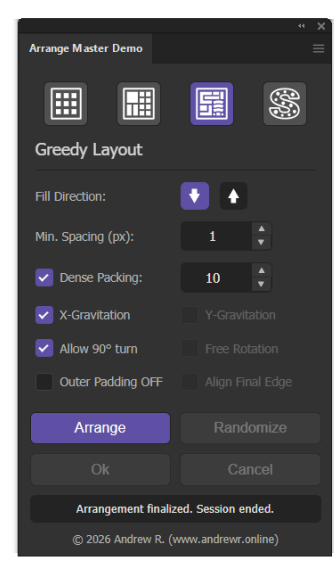
When the **Dense Packing** checkbox is enabled, the plugin shifts from standard bounding-box calculations to exact True-Shape Nesting. This process is handled by the **Chromium Math Engine** running in the background.

The **Evolution Stepper** parameter controls the Genetic Algorithm used for this task. Instead of accepting the first valid placement, the engine generates multiple placement sequences, mutates them, and evaluates the density of each layout using Vector Path Analysis.

Comparison of arrangement results for different generation counts



1 Generation 5 Generations 10 Generations



- A value of **1** executes a single, fast pass.
- Increasing the value forces the algorithm to compute more generations, finding tighter interlocking coordinates for material optimization.
- In the demo version, the Evolution Stepper is capped at **15** generations.

Note: To protect the proprietary nesting algorithm, Dense Packing results in the demo version are finalized as a 150 PPI raster image with a watermark. Standard layout methods (Grid, Knolling) remain as editable vectors.

Hidden Capabilities

While the interface parameters are restricted, the core engine processes files with the exact same logic as the full version. The demo actively supports:

- **Multi-Layer Retention:** The engine temporarily groups objects that overlap across different layers (e.g., CUT, PRINT, and MARKS layers). It moves them as a single unit during the nesting process and restores them to their specific original layers upon finalization. This is critical for CNC/Laser Cutting preparation.
- **Clipping Mask Detection:** The algorithm correctly reads the true visible boundaries of clipping masks, ignoring hidden bleeding paths.

The Session Workflow: Why you must click "OK"

Arrange Master operates entirely on a non-destructive session model. When you click the **Arrange** button, the plugin hides your original selected vectors and creates a temporary working layer. This allows you to adjust spacing, change settings, and recalculate the layout instantly without permanently modifying the document.

Finalizing the Session

To complete the process, you must click the **Ok** button. This action deletes the hidden original files and commits the arranged results to the canvas. If you click **Cancel**, the plugin deletes the temporary layout and unhides your original selection exactly as it was.

Security Note: The demo actively monitors the session state. Any attempt to bypass the workflow (e.g., copying temporary items to the clipboard or closing the document before clicking "Ok") will trigger an automatic abort, clearing the temporary results.

Disabled Features (Available in Full Version)

The following features are visually disabled in the demo panel to indicate what is unlocked in the full commercial release:

- **Advanced Vector Gravity:** Y-Gravitation (horizontal packing) and Dual Gravity (45-degree packing) are disabled. The demo strictly uses X-Gravitation.
- **Free Rotation:** The ability to rotate objects 360° in 15° increments during True-Shape Nesting is locked.
- **Evolution Scaling:** The full version allows up to 50 generations for the Genetic Algorithm.
- **Automation Tools:** Single Item Fill (Grid), Fit to Container scaling (Knolling), Align Final Edge (Greedy), and Chaotic Mode (Shape Respect) are disabled.
- **Vector Output for Dense Packing:** The full version retains exact, editable vector paths after True-Shape Nesting.

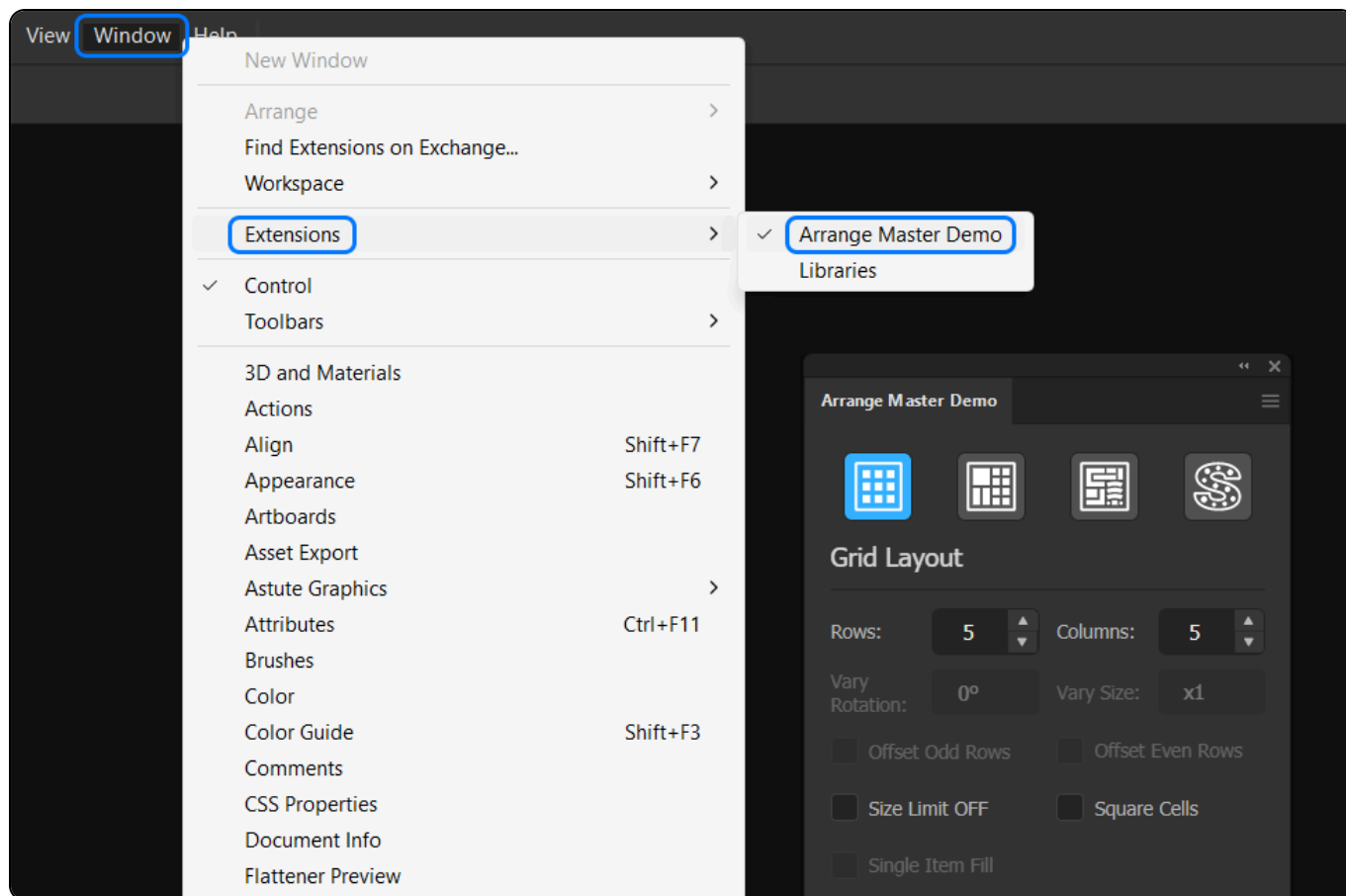
Installation & Removal

Plugin Isolation

The Arrange Master Demo is compiled as an independent CEP extension with a unique Bundle ID. It uses a separate memory space and a dedicated cache directory. **Installing the demo will not conflict with the full version of the plugin if both are installed simultaneously.**

How to Install

1. **Windows:** Extract the downloaded ZIP archive and run the `ArrangeMasterDemo-Setup.exe` file.
2. **macOS (ZXP):** Use a third-party manager like [Anastasiy's Extension Manager](#), [ZXPInstaller](#) or [Aescripts](#) to install the provided `.zxp` file.
3. Restart Adobe Illustrator. The panel is located under **Window > Extensions > Arrange Master Demo**.



How to Uninstall

- **Windows:** Go to Settings > Apps > Installed apps, locate "Arrange Master Demo", and click Uninstall.
- **macOS:** Open your ZXP Extension Manager, select the demo plugin from the list, and click Remove. Alternatively, manually delete the `com.andrewrybalko.arrangemasterdemo` folder from `~/Library/Application Support/Adobe/CEP/extensions/`.