

# Super GameReady Generator — User Guide

**Plugin Name:** Super GameReady Generator

**Author:** Nesij

**Blender:** 4.5+

**Panel:** 3D Viewport → N panel → **Super GRG**

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## 1) Overview

Super GameReady Generator bundles **batch renaming**, **material assignment**, **LOD generation** (global + per-object overrides), and **hierarchy-aware batch export** into a single panel. It speeds up building game-ready assets.

**Modules - Batch Rename:** Auto-numbered names; sync mesh data names. - **Apply Material:** Assign a material to selected objects; single slot or all slots. - **Generate LODs:** Create LODs by percentage or poly budget. Supports per-object overrides. - **Batch Export:** FBX/OBJ export with pivot, transforms, naming template, and folder hierarchy from collections.

**Scope - Selection:** Currently selected mesh objects.

- **Collection:** All mesh objects inside the chosen collection.

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## 2) Installation

1. Save the add-on as a `.py` file.
  2. *Edit* → *Preferences* → *Add-ons* → *Install...* and pick the file.
  3. Find **Super GRG** panel in the 3D Viewport **N** panel.
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## 3) Batch Rename

- **Object Name:** Base name (e.g., `Rock`).
- **Start / Padding:** Start index and zero padding (e.g., `01`, `002`).
- **Auto Number from Existing:** Detects the highest trailing number in selection and **continues from there**.
- **Rename Mesh Data:** Renames mesh data to match object names.
- **Presets:** Quick buttons: `Rock`, `Tree`, `House`.

**Steps:** Select objects → type `Object Name` → keep `Auto Number` on if needed → **Generate Names**.

**Notes** - Trailing number patterns supported: `Rock_01`, `Rock01`, any final digits at the end of the name. - **{object} value:** Uses the object's **name in Blender** (as seen in the Outliner).

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## 4) Apply Material

- **Material:** The material to assign.
- **Slot Mode:**
- **Single Slot:** Applies to the given **Slot Index** (0-based). Creates slots if needed.
- **All Slots:** Spreads to all existing slots (adds one if none exist).

**Steps:** Select objects → choose material → set  → **Apply Material**.

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## 5) Generate LODs

**Global Settings (in panel)** - **Source:**  or . - **Levels:** 1-5 LOD levels. - **LOD Mode:**

- **Percentage:** Ratio per level (e.g., 0.8, 0.5).
- **Poly Budget:** Target face counts; ratios are auto-computed. - **Output Collections:**
- **Separate:** Places results into , , ...
- **Single:** Puts all LODs into a single collection (named by you).

### What gets created?

For each source object:

- **LOD0:** One-to-one duplicate named .
- **LOD1..N:** Decimated copies based on chosen ratios or poly budgets.

**Per-Object Overrides (Object Properties → Super GRG: Per-Object LOD)** - **Use Override:** If enabled, the object uses its own settings instead of global ones. - **Mode / Levels:** Override mode and level count. - **Ratios or Polys:** Provide values for levels 1-5.

**Tips (Example Ratios)** - Hero prop: 0.7 → 0.45 → 0.25

- Small prop: 0.6 → 0.35 → 0.18
  - Hard-surface: Prefer Poly Budget (e.g., 4k → 2k → 1k).
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## 6) Batch Export

- **Source:** Selection / Collection.
- **Target Folder:** Defaults to **Desktop/Export** if empty.
- **Format:** FBX or OBJ.
- **Pivot:**
- **Original:** Keep current origins.
- **Center of Mass:** Move origin to surface center of mass (great for props).
- **Apply Unit:** Default **off** (equivalent to FBX exporter with "Apply Unit" unchecked).
- **Apply Transform:** **On** to bake transforms into the export.
- **Reset TRS:** Export duplicates at **Loc(0,0,0) Rot(0,0,0) Scale(1,1,1)**.
- **Keep Hierarchy:** Recreate collection hierarchy as folders.
- **Hierarchy Root:** Optional; choose a collection as the root for relative paths.
- **Naming Template:** Build file names from tokens.

**Available Tokens** | Token | Meaning | |---|---| | `{object}` | Object name (from Blender Outliner) | | `{scene.frame_current}` | Current scene frame | | `{collection}` | First collection the object belongs to | | `{collection_path}` | Full collection path from Scene/Root (A/B/C) |

**Examples** - `{object}` → `Rock_01.fbx` - `{object}_v{scene.frame_current}` → `Rock_01_v100.fbx` - `{collection}/{object}` + **Keep Hierarchy** on → `Props/Rocks/Rock_01.fbx` - `{collection_path}/{object}` → `Environment/Forest/Rocks/Rock_01.fbx`

**Steps:** Choose source → set target folder (optional) → format/pivot/transform → adjust **Keep Hierarchy** and **Naming Template** → **Export**.

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## 7) Best Practices

- **Pivot:** For small handheld props, use `Center of Mass`; for placement-critical assets, keep `Original`.
  - **Naming:** Use project-specific prefixes (e.g., `RS_`, `ENV_`). `Padding=3` keeps lists tidy.
  - **LOD:** Match budgets to shader complexity; push more aggressive LODs for tiny or distant assets.
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## 8) Troubleshooting

- **No mesh objects selected:** Ensure you selected mesh objects; non-mesh types are ignored.
  - **Material slot index:** If the index doesn't exist, the add-on creates slots; verify the material landed on the target slot.
  - **Failed to apply Decimate:** Linked or protected data may block applying; the modifier may remain unapplied on the LOD.
  - **Illegal characters:** File names sanitize `<>:"/\|?*` to `_`.
  - **FBX scale:** Be mindful of unit differences in the target DCC. With **Apply Unit** off, Blender units pass through to FBX.
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## 9) FAQ

1. **Do Batch Rename operations overwrite my old names?**
2. Yes, all selected objects are renamed based on the template. Consider making backups first.
3. **Can I use modifiers other than Decimate for LOD generation?**
4. Not automatically. The add-on only applies Decimate, but you can manually edit generated LODs.
5. **Can I add custom tokens to the Naming Template?**
6. No, only `{object}`, `{scene.frame_current}`, `{collection}`, `{collection_path}` are supported.

7. What happens if an object belongs to multiple collections when Keep Hierarchy is on?

8. The add-on uses the first collection found.

9. Does the 'Center of Mass' pivot option affect animated objects?

10. Yes, it can cause issues for rigged/animated meshes. It's best for static props.

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## 10) Quick Pipeline Example

1) Create `Rock_01..` with **Batch Rename**.

2) Use **Apply Material** with `All Slots`.

3) **Generate LODs** with `Poly Budget : 2000/1000/500`.

4) **Batch Export** with `Keep Hierarchy` on and `Naming Template={collection_path}/{object}_v{scene.frame_current}`.

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**Credits:** Super GameReady Generator by **Nesij**.