DayzHUB Recycler

User guide - version 1.0.3 - DayZ 1.30 - dayzhub.net



Players drop junk into a recycler and get materials back: nails, sheet metal, rags, sticks, wire and more. The machine works through the items one by one with a progress ring and a run queue, puts the materials into its output tray and keeps working while the player is away. Weapons give their attachments, magazines and rounds back. Nothing is ever lost: when the tray is full the machine pauses, and what does not fit in the player's inventory stays in the tray. Ten languages, Thai included.

There are two machines:

- **Server recycler** (admin): placed by an admin from the admin bar at traders, safe zones or anywhere. It needs no power, cannot be damaged and comes back after every restart.
- **Player recycler** (kit): a **Recycler Kit** the player carries and places like a base kit. It runs on a **car battery** and can be raided like any container.



A recycler in the world: the DAYZHUB RECYCLER plate and the "Open recycler" action.

Install (server owners)

1. **DayzHUB Core 1.0.4 or newer** is required (free with any DayzHUB mod, download it from My mods): install `@DayzHUB_Core` first.
2. Copy `@DayzHUB_Recycler` (client + server: the machine models and the menu) and `@DayzHUB_RecyclerServer` (server only - never give it to players) into your server folder.
3. Copy `keys\DayzHUB.bikey` from `@DayzHUB_Recycler` into your server's `keys` folder.
4. Start parameters: `-mod=@CF;...;@DayzHUB_Core;@DayzHUB_Recycler` and `-servermod=@DayzHUB_RecyclerServer`
5. **Licence:** on dayzhub.net, **My mods** > DayzHUB Recycler, add your server's public IP and game port. There is no licence file: the server checks in by itself at start. The status is in `<profiles>\DayzHUB\Licenses\STATUS_Recycler.txt`.
6. **Admins:** put your Steam64 ID in `<profiles>\DayzHUB\Admin\admins.json` (written by DayzHUB Core). The admin bar opens with **Insert**.
7. **Kits for players:** the kit class is `DayzHUB_RecyclerKit`. Add it to your trader or loot economy, or give kits from the DayzHUB Console.

> Without a valid licence **the server keeps running**: only the Recycler pauses (menus, runs, placing and dismantling answer "paused"), and the script log prints the link to add your server. A licence is per server (IP and game port); you can change the IP 3 times in 30 days. If the licence server cannot be reached, the mod keeps working for a 12 hour grace period.
> **Price on dayzhub.net:** EUR 25 per server; each extra server EUR 8; a 7-day test version EUR 5, with an upgrade to the full licence after the test for EUR 20.

Your files (written once, never overwritten by an update)

Everything is in `<profiles>\DayzHUB\Recycler\`. The first start writes the files with the defaults. You can edit them by hand (restart, or **Reload** on the admin page) or change them on the admin page.

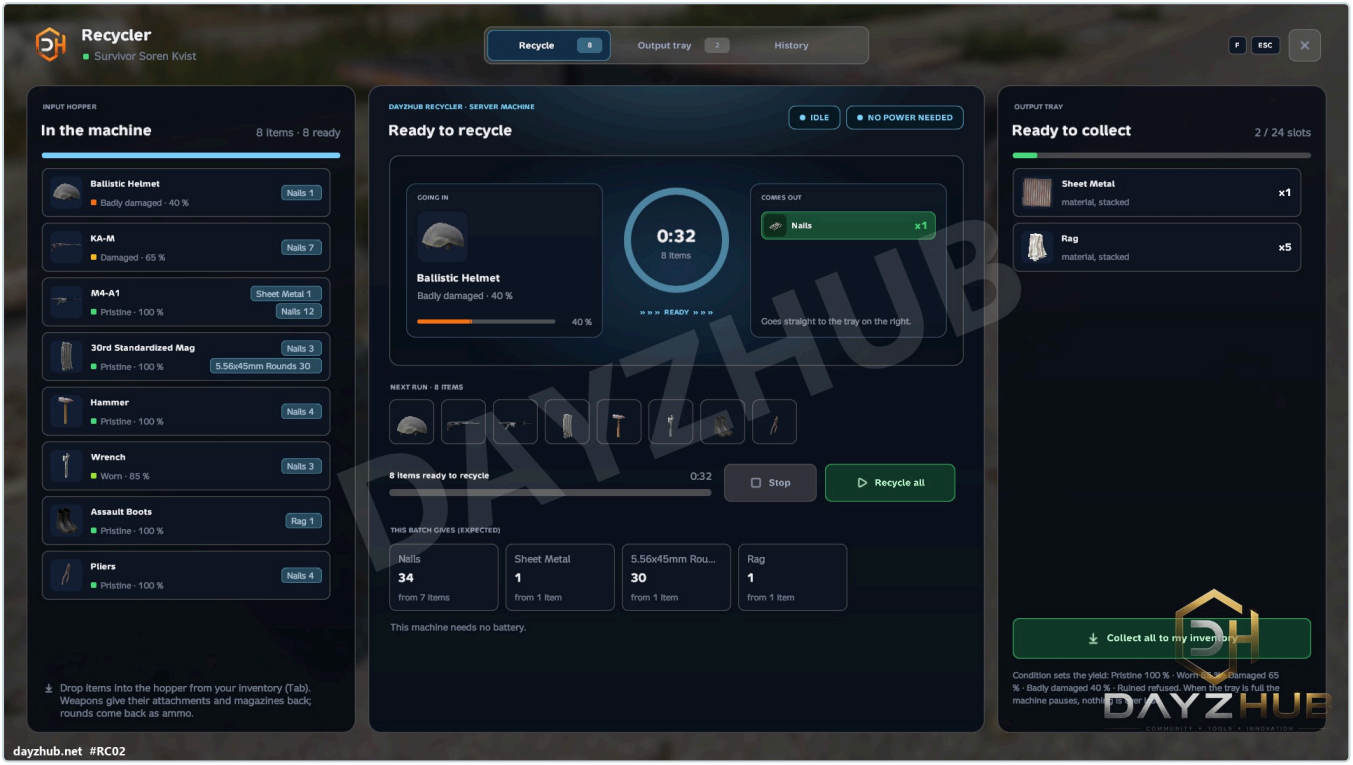
File	What it holds
`Settings.json`	every setting (below) and the blacklist
`Recipes.json`	the recipes: what each item gives (21 starter recipes)
`Machines.json`	the server recyclers placed by admins: name, position, turn, who placed it and when
`Console.json`	DayzHUB Console link (on by default)
`Logs\`	one log per day, and `runs-<date>.log`: every run with player, Steam ID, what went in and what came out
`Backup\`	`Settings-<date>.json`: the old file, saved once a day before the admin page saves a change

> **Updates keep your values.** Every file has a version (`ConfigVersion` , in Console.json `configVersion`). When a future update adds new keys, the file is upgraded once: your values stay, new keys get their defaults, the old file is kept next to it as `<name>.v<old>-<date>.bak.json` , and one line goes into the log. A value out of range is replaced by a safe value with a `[WARN]` line; a file that cannot be read is left alone and the defaults are used, with an `[ERROR]` line that says what to fix.

For players

Open the recycler

Look at the machine from close by (2 m) and press **F** (**Open recycler**), from any stance. The menu closes with **F**, **Esc** or the X, and closes by itself when you walk away from the machine. Put items into the machine the normal way: open your inventory (Tab) at the recycler and drop them into its hopper.



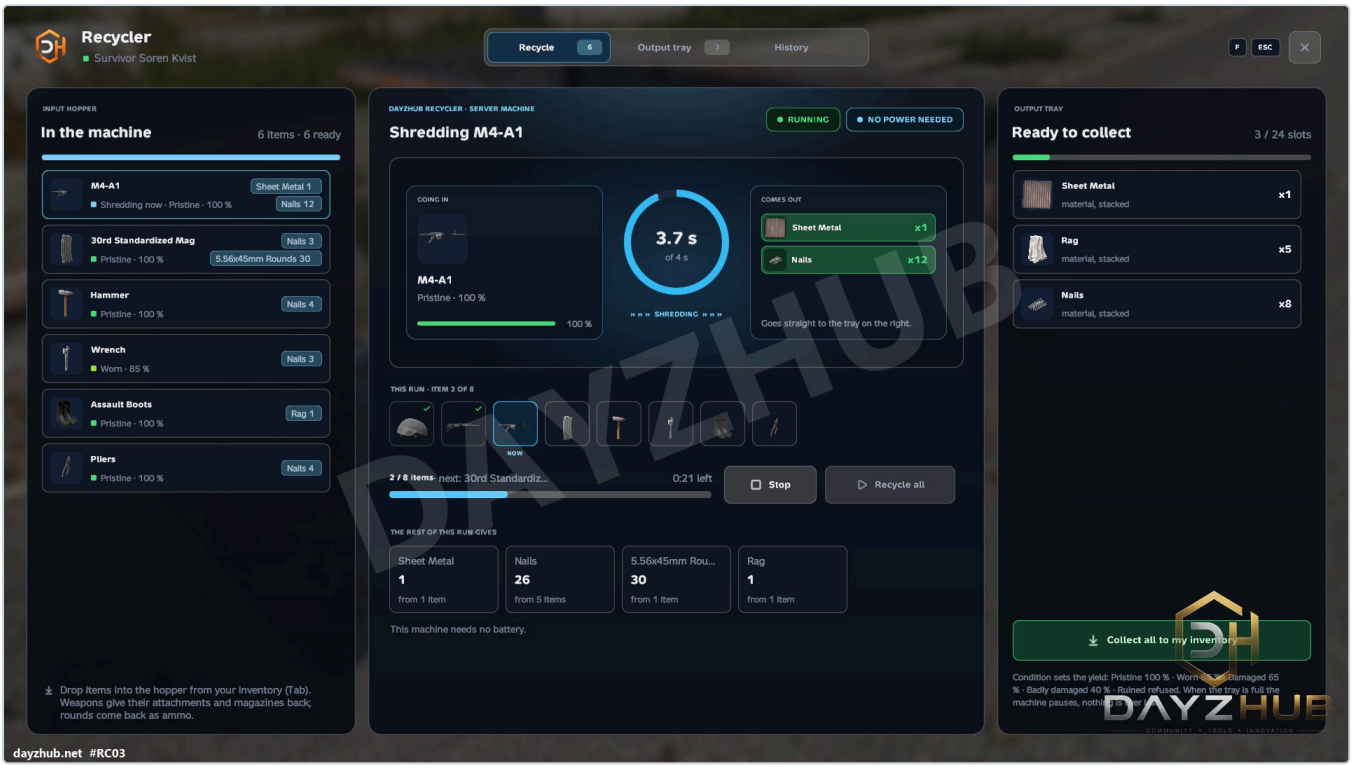
The menu: what is in the machine on the left, the next run in the centre, the output tray on the right.

Input hopper (left)

Every item in the machine with its real picture, its condition and the exact materials it gives ("Nails 12"). Items that cannot run show why: **EMPTY IT FIRST** for a backpack or container with items inside, **NOT RECYCLABLE** for ruined or blocked items.

Recycle all, the progress ring and the run queue (centre)

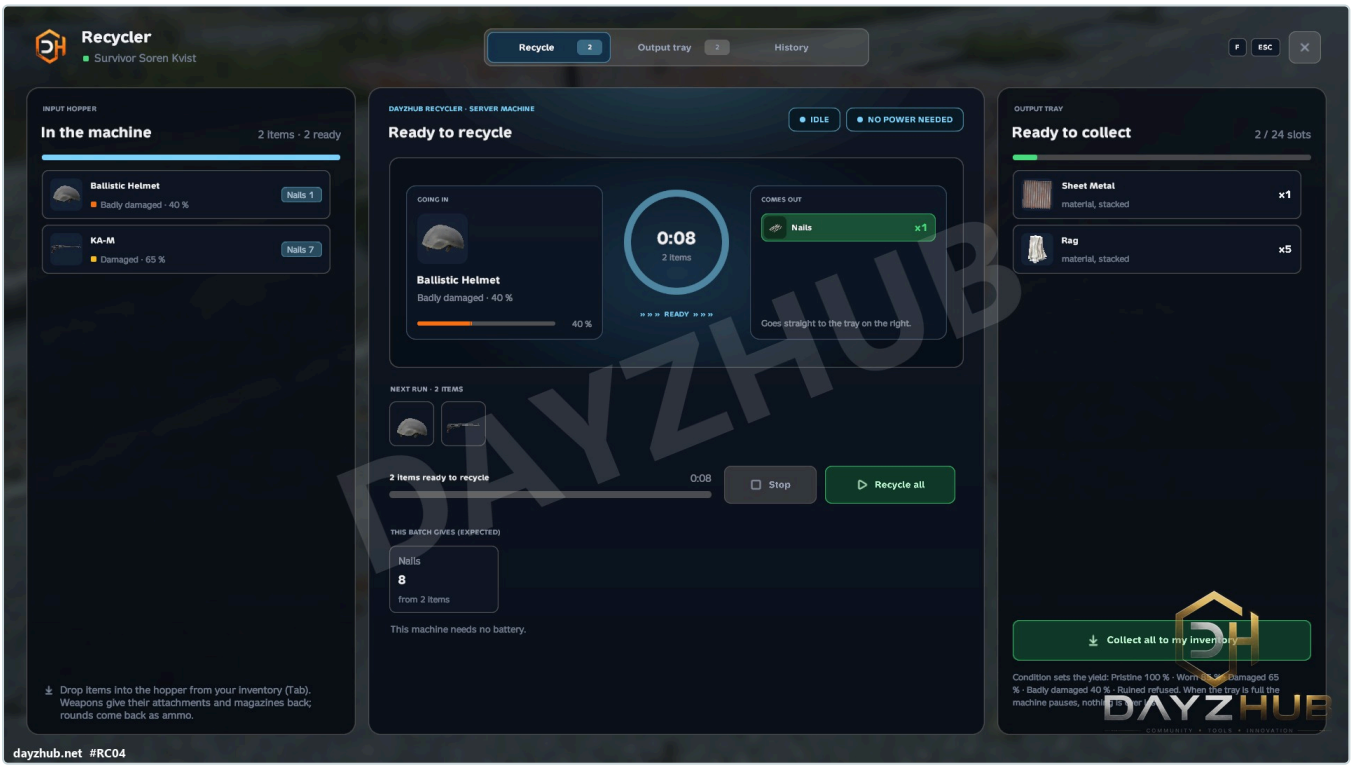
Recycle all starts a run. The **GOING IN** card shows the item in the machine, the ring counts down its seconds, and **COMES OUT** shows what it gives. Under it the run queue shows every item of this run (done, now, next), the progress bar, the items left and the time left, and what the rest of the run will give. **Stop** ends the run; the items not done yet stay in the hopper. The run keeps going when you close the menu or walk away. When nothing can run, the centre says why: the hopper is empty, nothing here can be recycled, no battery, battery flat, or the tray is full.



A run in progress: the item going in, the ring, what comes out, and the queue (item 3 of 8).

Condition sets the yield

Pristine items give 100 %, worn 85 %, damaged 65 %, badly damaged 40 %. Ruined items are refused. The admin can change these numbers.



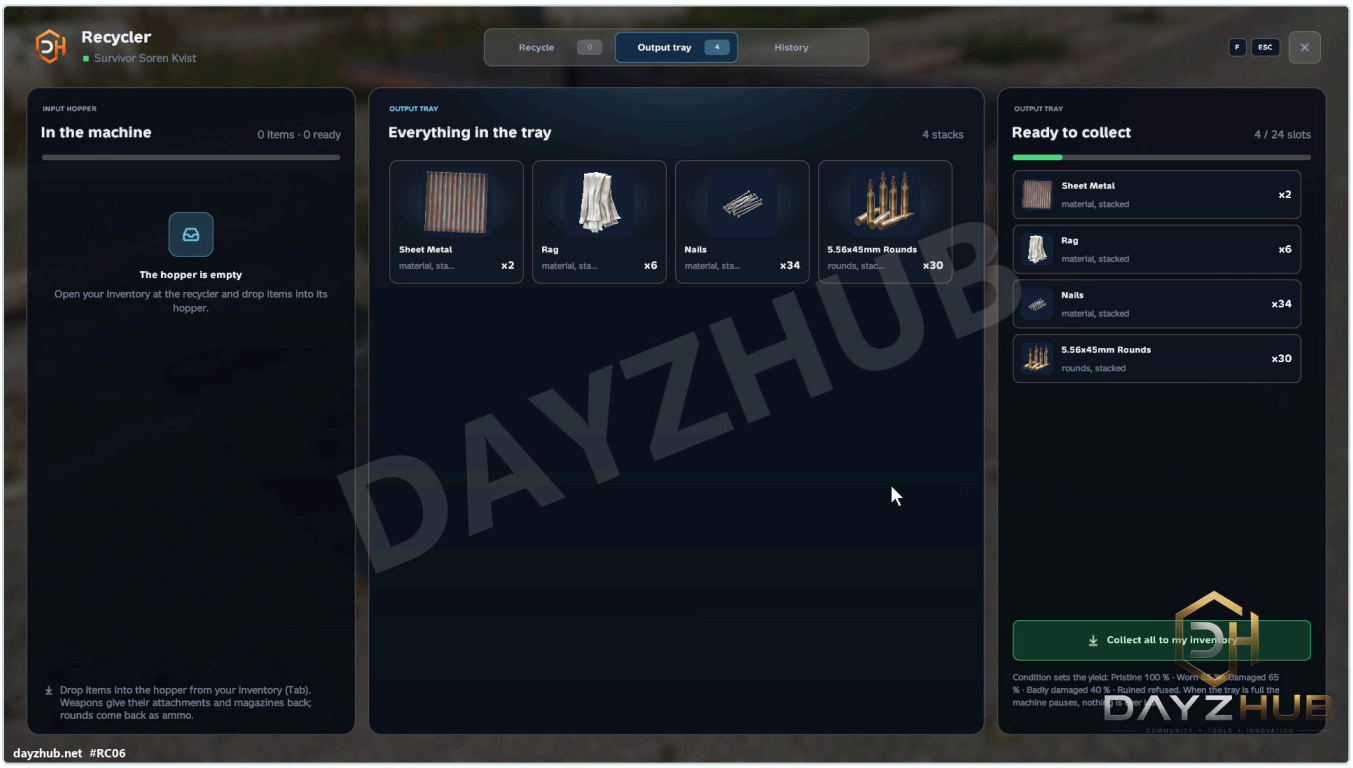
A badly damaged helmet gives 40 % of the materials.

Output tray and Collect all

The materials go into the machine's output tray, stacked per material (right column, and the **Output tray** tab with large pictures). **Collect all to my inventory** puts them in your inventory: stacks you carry are topped up first, and long items are turned to fit. **What does not fit stays in the tray** (nothing is dropped on the ground), and you can collect it later. When the tray is full, the machine pauses and starts again as soon as something is collected.



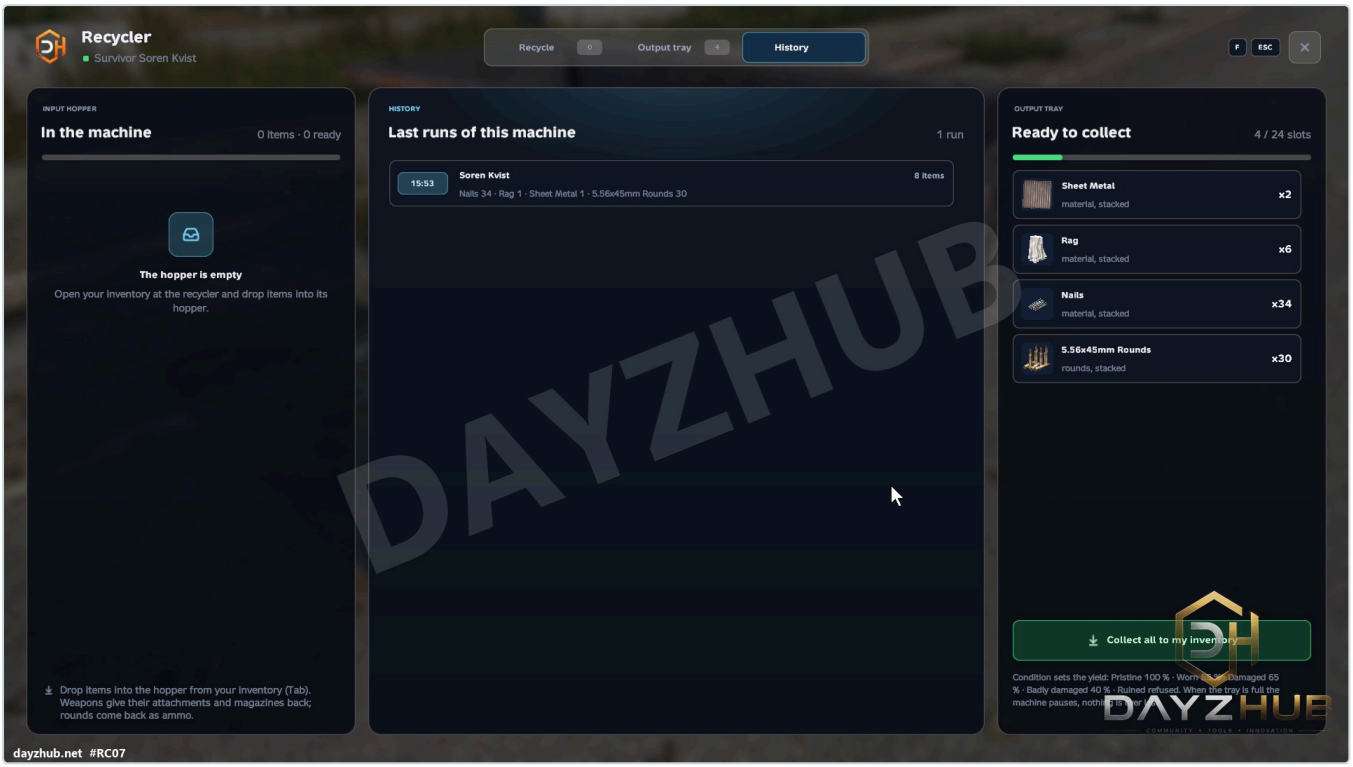
Collect all with a full inventory: "Collected 1 item / 4 items stay in the tray - no space".



The Output tray tab.

History

The **History** tab lists the last runs of this machine: time, who ran it, how many items and what came out.



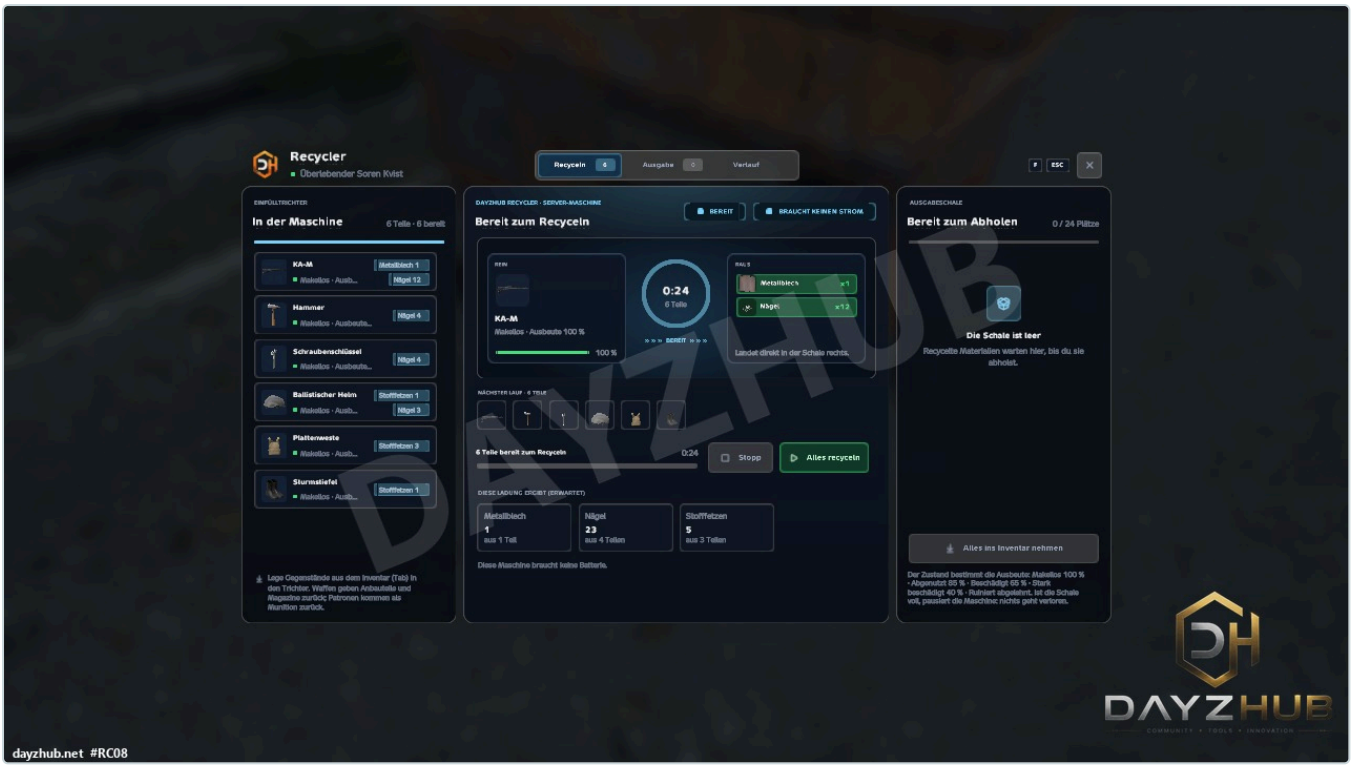
History: the last runs of this machine.

Weapons, magazines, ammo

A weapon gives its attachments and its magazine back whole, and the rounds come back as ammo piles. A magazine gives its rounds back. An ammo pile is recycled per round (1 nail per 5 rounds by default).

Languages

The menu follows the game language: English, German, French, Spanish, Italian, Portuguese, Polish, Czech and Hungarian. It fits 1280x720 up to wide screens.



The menu in German at 1280x720.

The player recycler (kit)

The **Recycler Kit** is a box carried in both hands. Take it in your hands and place it like any base kit: the preview turns green where it fits and red where it does not; confirm to build the recycler. Each player may build up to `MaxMachinesPerPlayer` recyclers (2 by default).



The Recycler Kit, carried in both hands.



Placing: the green preview shows where the recycler will stand.



The player recycler, ready to open.

- **Power:** attach a **car battery** to the machine. Each item uses a little of its charge (10 of a full 1500 by default). The menu shows "Battery NN %", warns when it is low or cannot finish the run, and says "No battery" or "Battery flat".
- **Raidable:** anyone at a player recycler may use it and collect its tray, like any container. The DayzHUB Console log shows who collected from a machine they did not build.
- **Dismantle:** with a **screwdriver or a hammer** in your hands, use **Dismantle recycler** on your machine to get the kit back. It is only possible when the hopper, the tray and the battery slot are empty and no run is going.

Admin page (Insert > Recycler)

Only admins see the data; the server checks again on every action. Every change is checked before it is saved (a wrong value saves nothing and says why, with the allowed range), written to the file, used at once without a restart, and logged. The page has five tabs.



The DayzHUB admin bar with the Recycler page, tab Status.

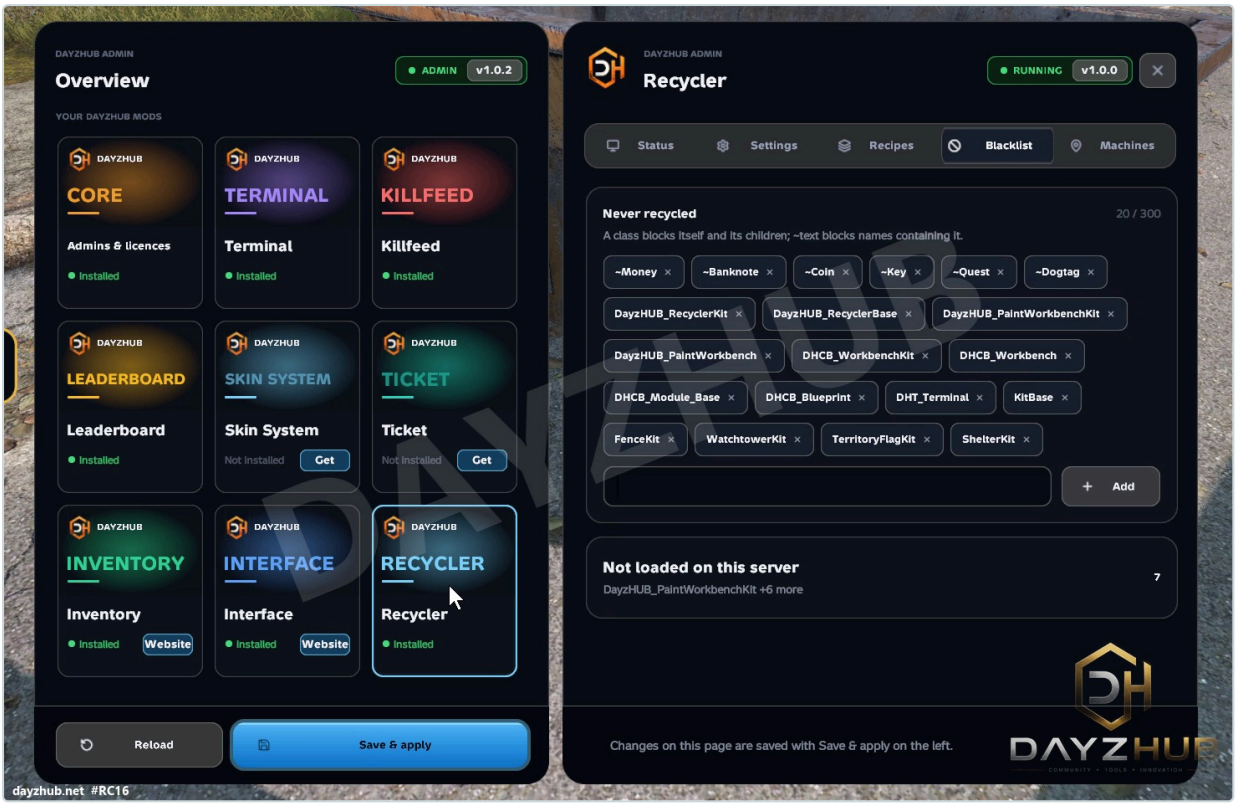
Tab	What you see and do
Status	machines in the world (server / player), jobs running and paused, runs and items today, top materials today, recipes in use, files, licence, DayzHUB Console link
Settings	seconds per item, items per run, tray slots, items per collect, battery on/off and use per item, the four yields, give back attachments / rounds, recyclers per player, Console alert per hour
Recipes	search (filters while you type), edit, remove, new recipe; the recipe editor with item pictures (below); the loop check warns when an output can be recycled into more of itself
Blacklist	items that are never recycled, as chips; "Not loaded on this server" names entries of mods you do not run
Machines	the server recyclers: Go to, Move, Remove; the number of player recyclers; Place a new server recycler



Settings.



Recipes: search, Edit, Remove.



Blacklist.

The recipe editor

Recipes tab, **Edit** on a recipe (or **New recipe**). What goes in and every output show as rows with the item's picture, its in-game name and its class name. An output row has **Amount** (a number, or a range like `5-12` = a random amount from 5 to 12) and **Chance %** (empty or 100 = always). The red cross removes a row. **+ Add item** opens a search: type part of a name or a class name and up to 20 matching items show with their pictures; a click adds one (the search stays open for the next). For what goes in, the search also takes a group (`#weapon`) or a parent class (`Rifle_Base` , shown as "Rifle (all)"). A class the game does not know shows as a red "Unknown item" row and the save is refused until it is fixed. **Players will see** shows the outputs the way the recycler menu shows them. **Advanced (text)** opens the same recipe as text (`MetalPlate:1, Nail:5-12, WeaponCleaningKit:1-3:5`) for quick edits: the rows and the text always show the same data. **Save recipe** saves it.

Placing a server recycler

Machines tab: type a name, press **Place**. The admin bar closes and a preview shows in front of you. The **mouse wheel** turns it, you can walk and look around, **left click** places it (your weapon does not fire) and **Esc** cancels (the pause menu does not open). The preview turns **red** on a bad spot (inside a wall or building, floating, sunk in the ground, in water); a click there is refused with the reason, and the server checks the same rule again. **Move** works the same way, only for an empty, idle machine. **Remove** is refused while the machine holds items; an empty one is removed from the world and from Machines.json.



The placing preview in town.



A red preview: this spot is refused.

Settings.json

Key	Default	Range	Meaning
`SecondsPerItem`	4	1-600	Seconds one item stays in the machine
`MaxItemsPerRun`	40	1-500	Items one Recycle all takes at most; the rest waits in the hopper
`TrayMaxSlots`	24	1-200	Lines of the output tray. A full tray pauses the machine; nothing is lost
`CollectMaxItems`	60	1-500	Items one Collect all gives at most; the rest stays in the tray
`PlayerMachineNeedsBattery`	1 (on)	0 / 1	The player machine needs a car battery. Admin machines never need power
`BatteryEnergyPerItem`	10	0-100000	Battery energy used per item (a full vanilla car battery holds 1500)
`YieldPristine` / `YieldWorn` / `YieldDamaged` / `YieldBadlyDamaged`	100 / 85 / 65 / 40	0-200	Yield in percent by condition. Ruined items are always refused

`ReturnAttachments`	1 (on)	0 / 1	Attachments and magazines come back whole. Off: such items are refused, never destroyed
`ReturnRounds`	1 (on)	0 / 1	Rounds in magazines and weapons come back as ammo piles. Off: such items are refused
`MaxMachinesPerPlayer`	2	-1-100	Player recyclers one player may build (-1 = no limit)
`AlertItemsPerHour`	400	0-100000	Console alert when one player recycles more items than this in one hour (0 = off)
`AlertBatteryPct`	10	0-100	Console alert: a player machine battery under this percent (0 = off)
`AlertTrayFullMinutes`	60	0-1440	Console alert: a tray full for this many minutes (0 = off)
`AlertUnattendedMinutes`	30	0-1440	Console alert: a machine running with nobody near for this many minutes (0 = off)
`AlertUnattendedMeters`	50	5-1000	"Nobody near" means nobody within this many metres
`Blacklist`	see below	up to 300	Items that are never recycled

The four `Alert...` health alerts are set in Settings.json or from the DayzHUB Console (they are not on the admin page).

Recipes.json

Each recipe has `Matches` (item classes, or a group), `Outputs` (`Output` class, `Amount` 0 to 1000 and `Chance` 0.1 to 100 %), `PerUnit` (1 = the amount is per unit of a stack, for ammo, planks and firewood), `Off` (1 = switched off) and a `Note`. An item uses the first match in this order: its exact class, then the closest parent class (for example `Rifle_Base`), then its group. Groups: `#weapon`, `#magazine`, `#ammo`, `#clothing`, `#food`, `#container`, `#any`. An item that matches no recipe is not recyclable. Each class may be used by one recipe only. A wrong class name or amount is refused with the reason, and a loop (an output that can be recycled into more of itself) is reported.

Chance. An output with a `Chance` under 100 drops only sometimes, so a recipe can give common materials every time and a rare part now and then. The server rolls it once for every recycled item: a hit gives the whole amount (after the condition yield), a miss gives nothing. In a `PerUnit` recipe every unit of the stack rolls on its own and the hits add up. Chance 100 (or no chance) = always. On the admin page write it after the amount: `Nail:12, WeaponCleaningKit:1:5` = 12 nails always and a 5 % chance of a cleaning kit. Players see the chance next to the output in the recycler menu. Recipes.json files from 1.0.1 are upgraded once with `Chance` 100 on every output (nothing changes).

Random amounts. An amount can be a range `min-max`: every roll gives a random whole number from min to max, both included. `Nail:5-12` = 5 to 12 nails for each recycled item; with a chance, `WeaponCleaningKit:1-3:5` = a 5 % chance of 1 to 3 kits. A range is two whole numbers from 0 to 1000 (max

at least 1). In Recipes.json it is `"Amount": 5, "AmountMax": 12`; no `AmountMax` (or 0) = a fixed amount, so older files work unchanged. In a `PerUnit` recipe every unit rolls its own amount, and the condition yield applies as usual. Players see "5–12" in the recycler menu; the tray space check counts the highest amount; the run log lists what each run really gave.

#	Matches	Gives (Pristine)	Note
1	Rifle_Base	MetalPlate 1, Nail 12, WeaponCleaningKit 1 (5 % chance)	rifles; attachments, magazine and rounds come back
2	Pistol_Base	Nail 8	pistols; attachments, magazine and rounds come back
3	#weapon	Nail 6	any other firearm
4	Magazine_Base	Nail 3	magazines; the rounds come back
5	Ammunition_Base	Nail 0.2 per round	ammo piles: 1 nail per 5 rounds (per unit)
6	Clothing	Rag 2	any clothing
7	HelmetBase	Rag 1, Nail 3	helmets
8	Vest_Base	Rag 3	vests
9	Shoes_Base, Gloves_Base	Rag 1	shoes and gloves
10	BurlapSack	BurlapStrip 6	cloth
11	WoodenLog	Firewood 4	wood
12	WoodenPlank	WoodenStick 2 per plank	wood (per unit)
13	Firewood	WoodenStick 2 per piece	wood (per unit)
14	Pot, MetalPlate	Nail 6	metal
15	BarbedWire	MetalWire 2	metal
16	MetalWire	Nail 5	metal
17	Hammer, Screwdriver, Pliers, Wrench, PipeWrench, CanOpener	Nail 4	small tools
18	Crowbar, Hacksaw, HandSaw	Nail 6	metal tools
19	Shovel, FieldShovel, Pickaxe, Hatchet, WoodAxe, FirefighterAxe, SledgeHammer	Nail 6, WoodenStick 1	big tools
20	BakedBeans, CatFood, Crab, DogFood, Halva, Peaches, Pork cans (`..Can_Opened`)	Nail 2	empty food tins
21	Sardines, Sarma, Spaghetti, TacticalBacon, Tuna, Unknown food cans (`..Can_Opened`)	Nail 2	empty food tins

Blacklist (never recycled)

A class name also blocks every item made from it; `~text` blocks every class whose name contains the text. Defaults: `~Money ~Banknote ~Coin ~Key ~Quest ~Dogtag`, our own machines and kits (`DayzHUB_RecyclerKit`, `DayzHUB_RecyclerBase`, `DayzHUB_PaintWorkbenchKit`, `DayzHUB_PaintWorkbench`, `DHCB_WorkbenchKit`, `DHCB_Workbench`, `DHCB_Module_Base`, `DHCB_Blueprint`, `DHT_Terminal`) and the vanilla base kits (`KitBase`, `FenceKit`, `WatchtowerKit`, `TerritoryFlagKit`, `ShelterKit`). Sewing, leather sewing, weapon cleaning, epoxy, tire repair and first aid kits stay recyclable.

DayzHUB Console

With the DayzHUB Console agent on your server, the Recycler links by itself (`Console.json` , on by default; set `"enabled": 0` to switch it off).

- **Map markers:** every recycler (server recyclers in ice blue, player recyclers in amber) with its state, battery, queue, tray, who placed it and when.
- **Events** (one line per run, never per item): `RC_RUN` , `RC_COLLECT` (marked when someone empties a player machine they did not build), `RC_PLACE` , `RC_DISMANTLE` , `RC_REFUSED` (a blacklisted item was put in a hopper), `RC_ALERT` (more items per hour than `AlertItemsPerHour`).
- **Machine health alerts** (checked once a minute; each fires once per machine and again only after it cleared): `RC_BATTERY_LOW` , `RC_TRAY_FULL_LONG` , `RC_UNATTENDED` .
- **16 actions:**

Where	Actions
World	Status, Reload (settings and recipes), Stop all jobs, Show settings, Change a setting, Blacklist add / remove, List recipes (15 per page), Add or edit a recipe, Remove a recipe, Switch a recipe on / off
Machine (map marker)	Stop this job, Empty the tray to the ground, Remove this recycler (refused while it holds items or a battery), Charge its battery to 100 %
Player	Give recycler kits (1-10), Runs of this player today

Settings, blacklist and recipe changes from the Console go through the same checks, backup and log as the admin page. There is no kick or ban. Server recyclers are placed and moved in game from the admin page only, not from the Console.

Thai language

Every DayzHUB HUD, menu and admin page of this mod can show in Thai. Set `"language": "th"` in `<profiles>\DayzHUB\DayzHUB_Core\Settings.json` and restart the server. Item names and action prompts stay as the game shows them.

FAQ and troubleshooting

- **No "Open recycler" action:** stand closer (2 m) and look at the machine. Check that the player runs `@DayzHUB_Recycler` and that the server runs `@DayzHUB_RecyclerServer` with a licence (see the script log; a missing server part is named there).
- **"Paused" everywhere:** the licence is not confirmed. Add the server's IP and game port in My mods on dayzhub.net; the status is in `STATUS_Recycler.txt` .
- **Recycle all is grey:** nothing in the hopper can run. The centre panel says why (empty, not recyclable, no battery, battery flat, tray full).
- **The machine stopped by itself:** the tray is full ("Paused: the tray is full"). Collect, and it goes on.
- **Collect left items in the tray:** your inventory is full. Make room and collect again.
- **A backpack is refused:** empty it first. Containers with items inside are never shredded.

- **An item says NOT RECYCLABLE:** it is ruined, blacklisted, or no recipe matches it. Add a recipe on the admin page.
- **Cannot dismantle my recycler:** take out every item, collect the tray, remove the battery and stop the run first. You need a screwdriver or a hammer in your hands.
- **Cannot build another recycler:** you reached `MaxMachinesPerPlayer`.
- **My changes to Settings.json did nothing:** look for `[WARN]` / `[ERROR]` lines in `Logs`; a value out of range is replaced by a safe one.
- **A server recycler is missing after a restart:** it comes back from Machines.json by itself. Check `Off` in its entry.

Compatibility

DayZ 1.30. Tested together with Expansion, LBmaster and TheModBase mods, the DayzHUB Console agent and every DayzHUB paid mod. Idle machines cost nothing, and nothing runs on the client while the menu is closed.

Support: dayzhub.net and the DayzHUB Discord.