

Class Parameter	
Value	Description
1	Item
2	Equipment
3	Drill
This sets a partial equipment type.	

Type Parameter			
Value	Description	Value	Description
1	Galder Coupons	17	Ears
2	Sword Equip	18	Tails
3	Hat Equip	19	Fashion (Top/J- acket)
4	Inner Equip	20	Fashion (Botto- m/Pants)
5	Fashion (Shoes)	21	Fashion (Torso/Shoulder)
6	Drill	22	Fashion (Belt)
7	Accessory and Sprint	23	Fashion (Acces- sory)
8	Shield Equip	24	Head Accessory
9	Unused	25	Face Accessory
10	Potions	26	Fashion (Hand/- Glove)
11	Cards	27	Fashion (Socks)
12	Animated Jewels (Crystal, Lapis Lazuli, etc.)	28	Skill card
13	Pets	29	Ammo
14	Compound Etc. Item (Monster Drop)	30	Galder (4 stacks)
15	"Usables" (Boxes, Ports, Etc.)	34	Cape
16	Throwing Items	35	Fortune Card
*	*	*	*
999	Recent/Testing		
Further sets the item type.			

SubType Parameter					
Value	Description	Value	Description	Value	Descri- ption
0	N/A	2	Sword	3	Hat
4	Innerwear	^5	Fashion (Shoe)	6	Drill
7	Accessory	8	Shield	10	HP Recovery
11	MP Recovery	12	HP & MP Recovery	18	Buffal- o/Bunny Card
19	Raccoon/Cat Card	20	Lion/Fox Card	21	Dragon/S heep Card
22	NPC Card	23	Power Card	24	Charm Card
25	Sense Card	26	Magic Card	27	Old Monster2 Card
33	Neutral Card	^36	Protein/Lock Candy	39	Throwing Item
41	Ears	42	Tail	^43	Fashion (Top/Jacket)
^44	Fashion (Bottom/Pants)	^45	Fashion (Torso/Sh- oulder)	^46	Fashion (Belt)
^47	Fashion (Accessory)	48	Head Accessory	49	Face Accessory
^50	Fashion (Hand/Glove)	^51	Fashion (Socks)	52	GM Amulet
53	Sprint	54	Gun	55	Skill Card
56	Ammo	60	Empty Card	61	MyShop Drill
62	Bracer Accessory	^63	Repair Powder	64	Galders (Tiny Stack)



SubType Parameter (cont)

65	Galders (Small Stack)	66	Galders (Medium Stack)	67	Galders (Large Stack)
69	Scrolls	70	Fortune Card	71	Disguise Kit
72	Poseidon/- Spinel Seed	73	Secret Card	74	Soul Gauge (For Guardians)
^75	Soul Ticket	^76	Soul Feather Pen	^77	Guardian Runes
^78	Custom Character Pets	^81	Pet Item Hunt		

Ones with a ^ = From ItemParamCM2

ItemFType Parameter

Value	Description
0	N/A
1	Power
2	Magic
3	Sense
4	Charm
5	Neutral

Note: Some of these values are found on early equipment and can be ignored.

Basically for Cards, the five types.

User Label Parameters

Parameter	Description
Name	Self-explanatory, the name that is displayed in-game.
Comment	The description that is displayed in-game.
Use	The purpose of said item that is displayed in-game.

Alias Parameters

Parameter	Description
Name_Eng	Dev notes for certain items, likely for ease of access/localization.
Comment_Eng	May contain references for some items or "description coming soon".
Note:	Some contain hashtags with numbers, usually tied to equipment and boxes.

This is not necessary to fill out for any equip; just make sure the parameters are there.

NRI & PVO File Labels

Parameter	Description
FileName	The directory pointing to the sprite/item.
BundleNum	The selected sprite/item.

Note: The value starts at 0. So if you're looking for a specific thing, look at the BundleNum info. The item you're looking for will be in the "Animations" tab.

Example: A Harkon is under "data\item\itm000.nri" with BundleNum "9". If you click "Image9" you'll find a Lapis Lazuli instead. Swap to the "Animations" tab and click the 9th option, and that'll get you a Diamond. The Harkon will be the right after that (10th option). Because the BundleNum starts at 0, you'll need to remember to add +1 to anything you look for.

TLDR: Locate the file, search in "Animations" tab with the NRI Viewer, use the BundleNum as reference and add +1, profit.

InvFile-eName	Uses the exact same info as FileName .
InvBundleNum	Uses the exact same info as BundleNum .
CmtFile-eName	Directory for the right-click Portrait visual for the item.
CmtBundleNum	The selected sprite.
EquipFile-eName	Points to said equipment/drill, leave blank if not either.

NRI & PVO File Labels (cont)

PivotID Points to an items source ID from a PVT file as reference. Mainly used for equipment with different levels/options.

PaletteID Points to an items source ID from one of the [ChrPaletteTable#] tables as a reference (Generally unused and set to 0; possibly good for recolors; untested)

Stuff relating to .NRI, .PVO, and .PVT files; this uses the "Animations" tab rather than the "Images" with the NRI Viewer. But thankfully a lot of stuff happens to be organized under the same **BundleNum**, minus illustration.

Options Parameter

Value	Description	Value	Description
0	No property	16384	Equippable to Character Type
1	Equipment	32768	Custom Data (More research needed)
2	Use Item	65536	Cannot be stored in Warehouse (Angelina)
4	SelectTarget-Object	131072	Cannot be stored in Bank (Lisa)
8	SelectTarget-Position	262144	Cash Shop Management Items (MyShop/Recycleable)
16	Equippable	524288	Autodrill Pets
32	Usable to Self	1048576	Absolute Unique
64	Usable to Player	2097152	Legendary Boss Equips
128	Usable to Monster	4194304	Quest Item Ditch Warning
256	Unbuyable	8388608	Not Recyclable
512	Unsellable	16777216	Not Temperable
1024	Untradable	33554432	Skin

Options Parameter (cont)

2048	Unpick-up-able	67108864	Event (From any Event)
4096	Undroppable	134217728	Dummy (Exchange Items)
8192	Unvanishable	268435456	UseSafeZone (Used for all skins)

Values for the **Option** Parameter.

HideHat & ChrTypeFlags Parameter Values

Character	First Job Value	Second Job Value	Third Job Value
Bunny	1	512	262144
Buffalo	2	1024	524288
Sheep	4	2048	1048576
Dragon	8	4096	2097152
Fox	16	8192	4194304
Lion	32	16384	8388608
Cat	64	32768	16777216
Raccoon	128	65536	33554432
Paula	256	131072	67108864

Both use the same data. HideHat will hide ears for hats while ChrTypeFlags only allows specific characters to use said item.

GroundGFlags & SystemFlags

Parameter	Description
GroundGFlags	Best left at 0
SystemFlags	Best left at 0
Unsure what these do--they're all left at 0 as far as could be seen	

OptionsEx Parameter

Value	Description
0	N/A
1	Apply Random stat range
2	Apply elemental property
16	Boss Equipment Set. Also on the Desert Beach set for some reason...
32	?? Wedding Veil
64	On certain teleport items that are not consumed (Dimensional Key / Card ID Quest ports / Etc)



OptionsEx Parameter (cont)

512 ?? Befana's Unstable Elixir (Hair color goes back to normal--Assembly-based interactive event?)

1024 GM Drill

2048 ?? Soul Kronos Helmet / Tartarus Gear / Boss Hammers

8192 ?? Disabled Swords + Odd JP Ghost Heads

16384 Soul Weapon

Note: Values can be included together. (Example: "1/2" means the equipment has a random stat range plus an elemental stat.)

Contains an unknown unique property; or apply **RandomStatValue-Table**. (Mainly from equipment in ItemParamCM2).

Weight, Value, MinLevel Parameters

Parameter	Description
Weight	Set the WT value for an item
Value	Set the retail galder pricetag
MinLevel	Minimum level required to use/keep
Value only affects in-game Shop vendors such as Item Girl.	

Effect Parameter Values

Value	Description	Value	Description	Value	Description
0	N/A	2-10	Beta Spell Skillcards (no longer used)	11	Recovery Item
12-13	Beta Heal Cards (no longer used)	14	Portable Port	15	Hair Dye
16	Equip Ammo	19	Emergency Port	20	Portable Port AD
21	Befana's Unstable Elixir	22	Open Box	23	Master's Authority
24	Point Back 40	25	Build Graph Reset	26	Point Back All

Effect Parameter Values (cont)

27	Store More Permit	28	Teleport/-Transfer Map	29	Resurrect/Revive
30	Recharge Coupon	31	Reidentifier 3000	32	TBN
33	Mic	34	Memory Port	35	Read Book/Letter/Etc
36	Artisan's Flame	37	Star Tear	38	Allen Bottle
39	Friend Finder	40	Erin's Secret Book	41	Voice Pet? Equip Pet? Auto Loot?
42	Poseidon Seed	43	Worn/Old Treasure Map	44	Weird Treasure Map
45	Soul Charge for Guardians (Not sure if used)	46	Fiesta Ticket	47	Character Boxes
48	Earring???	49	Locked Boxes	50	Key
51	EXP/TM Booster	52	"Seals" (Alternative Fortune)		

Makes an assembly-based event occur based on use.

EffectFlag2 & SelRange Parameters

Parameter	Description
EffectFlag2	N/A (All left at 0)
SelRange	All left at 0 with the exception of Beta Magic Card

Time & Drill Parameters (Life, Depth, Delay)

Parameter	Description
Life	Timed/Limited Items (For the EXP/TM Boosters) / Drill Life Span (Not used in this table)
Depth	For the three drills shown in the table, likely for testing. (Item_DrillParam is where they're used)
Delay	Can be ignored, tied to Beta Magic Card.

Stat-Type Parameters

Parameter	Description
AP	Gun/Throwing Attack Power (Not to be confused with the regular AP stat or APPlus)
HP	Amount of HP to recover (Health Potions/Etc)
HPCon	Amount of HP that's consumed (Not used in this table)
MP	Amount of MP to recover (Health Potions/Etc)
MPCon	Amount of MP that's consumed. Also used for Card MP values
Money	Amount of Galder obtained from coupons.
APPlus	Attack Power (Not to be confused with the first "AP" in the table.)
ACPlus	Accuracy
DXPlus	Dexterity
MaxMPPlus	Magic Point Capacity
MAPlus	Magic Attack
MDPlus	Magic Defense
MaxWTPlus	Weight Capacity
DAPlus	Detect Ability
LKPlus	Luck
MaxHPPlus	Health Capacity
DPPlus	Defense Power
HVPlus	Evasion
HPRecoveryRate	HP regen rate from pets.
MPRecoveryRate	MP regen rate from pets.

Stat-Type Parameters (cont)

Note: The main bread and butter to adjust/define static stats.

Card-based Parameters

Parameter	Description
CardNum	Determines rank of card, access to grade, and which params appear
CardGenGrade	Points to "CardGenGrade"; determines which Grade Ranges are allowed
CardGenParam	Purpose unknown, unless this is a droprate from Card Battling
DailyGenCnt	Possibly a limit you can obtain via Card Battling.

Table calculations on Card Life included below

CardNum Lookup Table

CardNum	Most Common Rank	Life	Card Family	For Fortune Ranks
0	None	None	Dummy/invalid/neutral	Lowest (e.g. No.81 HV)
1	1	6	Boss Cards	Scales
2	2	5	High Tier Cards	Scales
3	3	5	Low-mid Cards	Scales
4	4	4	Mid cards	Scales
5	5	4	High-low Monsters	Scales
6	6	4	Mid-low Monster	Scales
7	7	3	Characters primarily	Scales
8	8	3	Low Monsters	Scales
9	9	3	Most NPCs except Special	Highest (e.g. No. 90 HV)

Life is NOT controlled by Param or Grade, it is fixed by Rank from CardNum.

Rank 1-3 -> 5 to 6 life

Rank 7-9 -> 3 to 4 life



Card Life Lookup Table (simpler)

Rank	Life
1, 15	+6
2, 3, 13, 14	+5
4, 5, 6, 10, 11, 12	+4
7, 8, 9	+3
It's essentially a parabola-based lookup table.	

MyShop-Based Parameters

Parameter	Description
PartFileName	Points to the directory of a .pal file for fashion items
ChrFTYPEFlag	N/A (all left as 0 that could be seen)
ChrGender	N/A (all left as 0 that could be seen)
ExistType	Equipment with similar properties that cannot stack
0	Stackable
1	Timed
Ncash	Price tag for Cash items/Recycle Value
NewCM	N/A (all left as 0 that could be seen)
FamCM	N/A (all left as 0 that could be seen)
Summary	N/A (all left blank that could be seen)
ShopFile	Points to promotional Cash Mall items.
ShopBundleName	Points to the "Animation" sprite. (Use the same NRI method as above)
Paletteld	N/A (All left at 0 with some exceptions that can be ignored)

MinStatType & MinStatLv Parameter

Parameter	Description
MinStatType	Specific stat type requirement
7	Required DA
4	Required MA
0	Required AP
MinStatLv	Set minimum stat to equip. If both set to 0, no requirement stats will be shown.
Note: This is the culprit behind no equip swapping from Rust debuff.	

RefineIndex & RefineType Parameters

Parameter	Description	Parameter	Description
RefineIndex	Uses "RefineLevelTable" as a reference		
1	Form/Skin Equipment	2	Fashion (For some reason)
22	Event/Exchange Equipment	23	In-game Drop Pets
37	Character-specific EQs (Also includes 3rd job gemstones??)	38	Various Cash/Gacha Equipment
39	Egg Shop Equipment	47	Cash Item Equipment
48	Sylvia/Kooh Equipment	56	Cash Pet
64	Character/Boss/Voice Pet		
RefineType	Categorizes equipment types.		
0	N/A	1	AP
2	DP	3	MA
4	MD	5	GunAP
6	DA	7	HV
Known refine types. RefineIndex may vary based on XML.			

Misc Parameters

Parameter	Description
CompoundSlot	Self-explanatory. Can adjust compound slots of equips.
Note:	Intended range is 0~5. Any higher and the game's UI will EE if equip is inspected.
SetItemID	Likely used for equipment sets.
ReformCount	Extra temper chances? Unsure
GroupID	Unsure, all set to 0 that could be seen