
MCPE Documentation

Release 0.1

Intyre

Nov 04, 2017

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1.1 MCPE versions and checksum

1.1.1 0.10.0.5

Created	Mon Nov 3 17:01:00 2014
MD5	e664373bb384f75a6983dc20db2bd9f9
SHA1	10d67f5d8c022afe07054668b0e3c001eccce725

1.1.2 0.10.0.4

Created	Fri Oct 31 16:07:00 2014
MD5	eaab3b412683e24fb895e662ce082f551
SHA1	0009cff88459c7150ac2b8883081f717fe301d73

1.1.3 0.10.0.3

Created	Mon Oct 27 12:28:54 2014
MD5	3ce22a936fed35ae1a0f0d18b1cf30a0
SHA1	8844f3abf52e404852e36083b79e9c556418bd40

1.1.4 0.10.0.2

Created	Thu Oct 23 16:23:04 2014
MD5	6b0a593b307a31709d688c98b0abea8a
SHA1	ab082d1f8129b465248e6533acdcd7b971c5b6e

1.1.5 0.10.0.1

Created	Fri Oct 17 17:39:26 2014
MD5	7e90b774fb77d4e280954af8abc37b1a
SHA1	6634935b76aeee970703e4529d94dbf012fa9413

1.1.6 0.9.5.0

Created	Thu Jul 24 09:03:14 2014
MD5	75837027a0538163140a22575321d24e
SHA1	46dalbbf5eccc3dc14ef5c31e3f550f7b210d521

1.1.7 0.9.4.0

Created	Thu Jul 17 16:49:42 2014
MD5	4cd41b6b72b6f0de9371703c052f3de4
SHA1	332ad02500022b6ee6fd361401013d7834aa9f6a

1.1.8 0.9.3.0

Created	Wed Jul 16 18:22:52 2014
MD5	c6101921c9e7ba91e6c7acc5bbda0041
SHA1	c8580076da0f51b9d36ee5bb9f576e1a6406cd0a

1.1.9 0.9.2.0

Created	Tue Jul 15 17:53:50 2014
MD5	cc21de8984e69aec8198d23556656bfd
SHA1	dd8b45581558881742da38835de3e245e28d65b3

1.1.10 0.9.1.0

Created	Fri Jul 11 18:13:08 2014
MD5	3c32bcbf7fcedc98716935854be10316
SHA1	02fcc3721770e00ef3129d4ebd1c711027b16a38

1.1.11 0.9.0.12

Created	Mon Jun 30 20:01:52 2014
MD5	fddc0ba33dd5a2d81ee7564a6d2cc27f
SHA1	47c9122fb0dee1f3f2810f7dc99b28c302624b78

1.1.12 0.9.0.11

Created	Fri Jun 27 16:59:24 2014
MD5	b6dc75502ef39ded984159c6fce1fd34
SHA1	220e049aa7707e1fc7b7a67dbac67c8dfd005e10

1.1.13 0.9.0.8

Created	Tue Jun 24 15:57:38 2014
MD5	85c28c17fc1c66332e0be43f4fbaf86c
SHA1	8f01b0aa56d5e701cb5cfa19c8d7b86449f316d4

1.1.14 0.9.0.7

Created	Mon Jun 23 18:22:58 2014
MD5	c334c07c2f56acd76ca81323e6d6ad18
SHA1	074a48819561b5df31ea1867a839ffa35c29b7b3

1.1.15 0.9.0.6

Created	Thu Jun 19 17:13:46 2014
MD5	15ce2d41a75377a9ed21fc9d08c515f1
SHA1	8935411d9846b3a0c804aaf328b47f2e60ddb702

1.1.16 0.9.0.4

Created	Fri Jun 13 17:27:20 2014
MD5	646b98e594aea40d7790980331ac7a7b
SHA1	698ae67c165f5f5b1862cc3d45190elb67f0e9fd

1.1.17 0.9.0.3

Created	Wed Jun 11 16:01:34 2014
MD5	0911cec8344b68c11941e949147e7402
SHA1	34ea8baae4053e66504be1b74694439f713056d9

1.1.18 0.9.0.2

Created	Tue Jun 10 17:29:00 2014
MD5	09b1648c7143025447dcdcf51db5e3655
SHA1	0dfa15e0dcb05ba9752a79a6fda7462ae3984c10

1.1.19 0.9.0.1

Created	Mon Jun 9 16:53:28 2014
MD5	12b0d557d11a48c5efaf33d5f801806a
SHA1	cc7bd2702157db86500119bcca595ac1135eef48

1.1.20 0.9.0.0

Created	Thu Jul 3 11:34:20 2014
MD5	7398b69bb9f1dc3372c824a92a2b6eb9
SHA1	a6612e6e103798e05318ac2a33f31f33a6e7aada

1.1.21 0.8.1.0

Created	Wed Dec 18 09:29:10 2013
MD5	0557c2d3b7e0d68b20c1726cbb322c10
SHA1	c30bd6e3b72be7b97a222d79d1405b55f6d3bf71

1.1.22 0.7.6.0

Created	Fri Oct 11 12:36:28 2013
MD5	063c1cc8af7a0076cba0b4b009dd392a
SHA1	66e2d9df8b38c603c58b700a14a1f71cf0be5cdb

1.1.23 0.7.5.0

Created	Wed Sep 4 11:53:16 2013
MD5	9f646e1cf57f69b6a76b94dfc719c211
SHA1	ba40cd1f639c9e74f518991a0f2b3cf0075a083a

1.1.24 0.7.4.0

Created	Fri Aug 30 14:03:30 2013
MD5	ce4c31c82c32cfc48835d471e7e33863
SHA1	d1f31fc901ba4df188f561c0a62c11fde72e9a0b

1.1.25 0.7.3.0

Created	Thu Aug 15 10:29:38 2013
MD5	161bc70c33099e6cce897892120a45c8
SHA1	f267d557d090966dc0f6e2f7e084551d2dc49575

1.1.26 0.7.2.0

Created	Thu Jul 4 16:36:46 2013
MD5	101cfaa012269ddcffba7a54bbbdafc6
SHA1	f1bbf7f318466288ef523a4d13aac35ea0316c3b

1.1.27 0.7.1.0

Created	Fri Jun 7 17:10:34 2013
MD5	4372dc188d3e3b98d756a887e27b2c50
SHA1	9beada802e839c6cd8deadde526b2a7793349a28

1.1.28 0.7.0.0

Created	Wed Jun 5 19:34:58 2013
MD5	2eba5efa75f6fabd34f2d6c2f4017681
SHA1	fe0b63b8fd1a2941ae8f6b2e2d2c5377a2097425

1.1.29 0.6.1.0

Created	Thu Jan 31 20:35:42 2013
MD5	f5f7200651d75f03fe202d051ccd31c4
SHA1	dfaab7a254a19b32fc378c72a5505916069a2a17

1.1.30 0.6.0.0

Created	Wed Jan 30 13:57:18 2013
MD5	a3859b9c9c1f49f8a45d03e058b3bee8
SHA1	8ba82f69d874af6d2261a7db1d07d3fb4446287c

1.1.31 0.5.0.0

Created	Thu Nov 15 12:57:52 2012
MD5	ea07fdf5f03db8efdd3dc505ad60cda9
SHA1	30e67fd081e9557139b8925bd620f367e47870e7

1.1.32 0.4.0.0

Created	Thu Sep 6 11:00:28 2012
MD5	27e2f8aa62e60f5544e296ae95635632
SHA1	3aldff2666bdca184344a5a4446f15e1c61b17cd

1.1.33 0.3.3.0

Created	Thu Aug 9 18:03:00 2012
MD5	9e9977b94b101d147f9f1c462b696908
SHA1	897dca685a9b40fff88bd9882024ebee6c64fda4

1.1.34 0.3.2.0

Created	Tue Jul 17 08:20:06 2012
MD5	a5433123c90d004843c51a82e28bdc0a
SHA1	2e53d32e10dc3b82414c1d7acf6f937d8d61eb14

1.1.35 0.3.0.0

Created	Wed Apr 25 01:46:34 2012
MD5	eea30074734cbc4c39ac1cc6966c1cbc
SHA1	b071ea1957a6cec09dc16588a784f7561c1ec013

1.1.36 0.2.2.0

Created	Sun Mar 18 07:50:12 2012
MD5	8b067368f5b109d40466b508bb6afc7b
SHA1	78af7bf3569eb6dc4c89ca4e50db2b9198933856

1.1.37 0.2.1.0

Created	Thu Mar 15 01:06:48 2012
MD5	464ac369887229944630488639a7a174
SHA1	0b48db30c0e955573906a63e710450b071a4a300

1.1.38 0.2.0.0

Created	Sat Feb 11 12:20:04 2012
MD5	626e60ae67cfb2816b1b0d87c0a4190b
SHA1	16bb2190f656d24370cb45c1a33c2253e14c264c

1.1.39 0.1.3.0

Created	Fri Feb 29 03:33:46 2008
MD5	1aa5b92852ea699c1e9c3826aebc32e4
SHA1	702e585663dd0fd4c8ed564f981f7beb9ce3a30f

1.1.40 0.1.2.0

Created	Thu Oct 13 21:45:14 2011
MD5	eea48294ca763591e0ea6096a1a48948
SHA1	523ff7962b984322dd7d71788fb0ff931c5c4e64

1.1.41 0.1.1.0

Created	Fri Oct 7 21:35:54 2011
MD5	bdd26f376a24f77a6020f1727929e413
SHA1	7b874c3afc913ea97c062c3e18ae2e56dd735722

1.1.42 0.1.0.0

Created	Fri Aug 19 10:13:46 2011
MD5	6a33f66f6f1d2655feee70646fda8353
SHA1	e0273784f3c75a398c7b0a50f18ad4414baedeb8

1.2 v0.10.*

1.2.1 v0.10.0 Build 1

Created	Fri Oct 17 17:39:26 2014
MD5	7e90b774fb77d4e280954af8abc37b1a
SHA1	6634935b76aee970703e4529d94dbf012fa9413

- *Biomes*
- *Items*
- *Packet information*
- *Sounds*
- *Tiles*

Biomes

Names
Ocean
Plains
Desert
Extreme Hills
Forest
Taiga
Continued on next page

Table 1.1 – continued from previous page

Names
Swampland
River
Hell
Sky
FrozenOcean
FrozenRiver
Ice Plains
Ice Mountains
MushroomIsland
MushroomIslandShore
Beach
DesertHills
ForestHills
TaigaHills
Extreme Hills Edge
Jungle
JungleHills
JungleEdge
Deep Ocean
Stone Beach
Cold Beach
Birch Forest
Birch Forest Hills
Roofed Forest
Cold Taiga
Cold Taiga Hills
Mega Taiga
Mega Taiga Hills
Extreme Hills+
Savanna
Savanna Plateau
Mesa
Mesa Plateau F
Mesa Plateau
Redwood Taiga Hills M

Items

Names
shovel
shovelIron
pickaxe
pickaxeIron
apple
axe
hatchetIron
flint_and_steel
flintAndSteel

Continued on next page

Table 1.2 – continued from previous page

Names
bow_standby
bow
charcoal
coal
diamond
iron_ingot
ingotIron
gold_ingot
ingotGold
swordIron
swordWood
stick
shovelWood
pickaxeWood
hatchetWood
swordStone
shovelStone
pickaxeStone
hatchetStone
swordDiamond
shovelDiamond
pickaxeDiamond
hatchetDiamond
string
mushroom_stew
mushroomStew
swordGold
shovelGold
pickaxeGold
hatchetGold
gunpowder
sulphur
hoe
hoeWood
hoeStone
hoeIron
hoeDiamond
hoeGold
seeds_wheat
seeds
bread
helmet
helmetCloth
chestplate
chestplateCloth
leggingsCloth
boots
bootsCloth
helmetChain

Continued on next page

Table 1.2 – continued from previous page

Names
chestplateChain
leggingsChain
bootsChain
helmetIron
chestplateIron
leggingsIron
bootsIron
helmetDiamond
chestplateDiamond
leggingsDiamond
bootsDiamond
helmetGold
chestplateGold
leggingsGold
bootsGold
porkchop_raw
porkchopRaw
sign
porkchop_cooked
porkchopCooked
door_wood
doorWood
bucket
minecart_normal
minecart
saddle
door_iron
doorIron
redstone_dust
redstone
snowball
leather
brick
clay_ball
clay
reeds
paper
book_normal
book
slimeball
egg
compass.png
compass_item
compass
clock_item
clock
glowstone_dust
yellowDust
dye_powder

Continued on next page

Table 1.2 – continued from previous page

Names
dyePowder
bone
sugar
cake
bed
cookie
shears
melon
seeds_pumpkin
seedsPumpkin
seeds_melon
seedsMelon
beef_raw
beefRaw
beef_cooked
beefCooked
chicken_raw
chickenRaw
chicken_cooked
chickenCooked
spawn_egg
monsterPlacer
emerald
carrot
carrots
potato
potatos
potato_baked
potatoBaked
pumpkin_pie
pumpkinPie
netherbrick
netherbrickItem
quartz
netherquartz
beetroot
seeds_beetroot
seedsBeetroot
beetroot_soup
beetrootSoup

Packet information

- *LoginPacket (0x82)*
- *LoginStatusPacket (0x83)*
- *MessagePacket (0x85)*

- *SetTimePacket (0x86)*
- *StartGamePacket (0x87)*
- *AddMobPacket (0x88)*
- *AddPlayerPacket (0x89)*
- *RemovePlayerPacket (0x8A)*
- *AddEntityPacket (0x8C)*
- *RemoveEntityPacket (0x8D)*
- *AddItemEntityPacket (0x8E)*
- *TakeItemEntityPacket (0x8F)*
- *MoveEntityPacket (0x90)*
- *RotateHeadPacket (0x94)*
- *MovePlayerPacket (0x95)*
- *PlaceBlockPacket (0x96)*
- *RemoveBlockPacket (0x97)*
- *UpdateBlockPacket (0x98)*
- *AddPaintingPacket (0x99)*
- *ExplodePacket (0x9A)*
- *LevelEventPacket (0x9B)*
- *TileEventPacket (0x9C)*
- *EntityEventPacket (0x9D)*
- *PlayerEquipmentPacket (0xA0)*
- *PlayerArmorEquipmentPacket (0xA1)*
- *InteractPacket (0xA2)*
- *UseItemPacket (0xA3)*
- *PlayerActionPacket (0xA4)*
- *HurtArmorPacket (0xA6)*
- *SetEntityDataPacket (0xA7)*
- *SetEntityMotionPacket (0xA8)*
- *SetEntityLinkPacket (0xA9)*
- *SetHealthPacket (0xAA)*
- *SetSpawnPositionPacket (0xAB)*
- *AnimatePacket (0xAC)*
- *RespawnPacket (0xAD)*
- *SendInventoryPacket (0xAE)*
- *DropItemPacket (0xAF)*

- *ContainerOpenPacket (0xB0)*
- *ContainerClosePacket (0xB1)*
- *ContainerSetSlotPacket (0xB2)*
- *ContainerSetDataPacket (0xB3)*
- *ContainerSetContentPacket (0xB4)*
- *ContainerAckPacket (0xB5)*
- *ChatPacket (0xB6)*
- *AdventureSettingsPacket (0xB7)*
- *EntityDataPacket (0xB8)*
- *PlayerInputPacket (0xB9)*
- *FullChunkDataPacket (0xBA)*

LoginPacket (0x82)

Hex	0x82
ID	130

Structure

Type
Serialize
WriteBits
WriteBits
WriteBits
Serialize
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

LoginStatusPacket (0x83)

Hex	0x83
ID	131

Structure

Type
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

MessagePacket (0x85)

Hex	0x85
ID	133

Structure

Type
Serialize
Serialize

SetTimePacket (0x86)

Hex	0x86
ID	134

Structure

Type
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

StartGamePacket (0x87)

Hex	0x87
ID	135

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
Continued on next page

Table 1.3 – continued from previous page

Type
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

AddMobPacket (0x88)

Hex	0x88
ID	136

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

AddPlayerPacket (0x89)

Hex	0x89
ID	137

Structure

Type
WriteBits
Serialize
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
Continued on next page

Table 1.4 – continued from previous page

Type
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
IsNetworkOrderInternal
IsNetworkOrderInternal

RemovePlayerPacket (0x8A)

Hex	0x8A
ID	138

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

AddEntityPacket (0x8C)

Hex	0x8C
ID	140

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes

Continued on next page

Table 1.5 – continued from previous page

Type
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal

RemoveEntityPacket (0x8D)

Hex	0x8D
ID	141

Structure

Type
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

AddItemEntityPacket (0x8E)

Hex	0x8E
ID	142

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
IsNetworkOrderInternal

TakeltemEntityPacket (0x8F)

Hex	0x8F
ID	143

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

MoveEntityPacket (0x90)

Hex	0x90
ID	144

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
ReverseBytes
WriteBits

RotateHeadPacket (0x94)

Hex	0x94
ID	148

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
ReverseBytes
WriteBits

MovePlayerPacket (0x95)

Hex	0x95
ID	149

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

PlaceBlockPacket (0x96)

Hex	0x96
ID	150

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

RemoveBlockPacket (0x97)

Hex	0x97
ID	151

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

UpdateBlockPacket (0x98)

Hex	0x98
ID	152

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

AddPaintingPacket (0x99)

Hex	0x99
ID	153

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
Serialize
~RakString
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

ExplodePacket (0x9A)

Hex	0x9A
ID	154

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

LevelEventPacket (0x9B)

Hex	0x9B
ID	155

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

TileEventPacket (0x9C)

Hex	0x9C
ID	156

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

EntityEventPacket (0x9D)

Hex	0x9D
ID	157

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

PlayerEquipmentPacket (0xA0)

Hex	0xA0
ID	160

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

PlayerArmorEquipmentPacket (0xA1)

Hex	0xA1
ID	161

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

InteractPacket (0xA2)

Hex	0xA2
ID	162

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

UseItemPacket (0xA3)

Hex	0xA3
ID	163

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
ReverseBytes
WriteBits

Continued on next page

Table 1.6 – continued from previous page

Type
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
IsNetworkOrderInternal

PlayerActionPacket (0xA4)

Hex	0xA4
ID	164

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

HurtArmorPacket (0xA6)

Hex	0xA6
ID	166

Structure

Type
WriteBits

SetEntityDataPacket (0xA7)

Hex	0xA7
ID	167

Structure

Type
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

SetEntityMotionPacket (0xA8)

Hex	0xA8
ID	168

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
ReverseBytes
WriteBits

SetEntityLinkPacket (0xA9)

Hex	0xA9
ID	169

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

SetHealthPacket (0xAA)

Hex	0xAA
ID	170

Structure

Type
WriteBits

SetSpawnPositionPacket (0xAB)

Hex	0xAB
ID	171

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

AnimatePacket (0xAC)

Hex	0xAC
ID	172

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

RespawnPacket (0xAD)

Hex	0xAD
ID	173

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

SendInventoryPacket (0xAE)

Hex	0xAE
ID	174

Structure

Type
WriteBits
WriteBits
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

DroplItemPacket (0xAF)

Hex	0xAF
ID	175

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

ContainerOpenPacket (0xB0)

Hex	0xB0
ID	176

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

ContainerClosePacket (0xB1)

Hex	0xB1
ID	177

Structure

Type
WriteBits

ContainerSetSlotPacket (0xB2)

Hex	0xB2
ID	178

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

ContainerSetDataPacket (0xB3)

Hex	0xB3
ID	179

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

ContainerSetContentPacket (0xB4)

Hex	0xB4
ID	180

Structure

Type
WriteBits
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

ContainerAckPacket (0xB5)

Hex	0xB5
ID	181

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

ChatPacket (0xB6)

Hex	0xB6
ID	182

Structure

Type
Serialize

AdventureSettingsPacket (0xB7)

Hex	0xB7
ID	183

Structure

Type
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal

EntityDataPacket (0xB8)

Hex	0xB8
ID	184

Structure

Type
WriteBits
WriteBits
WriteBits
ReverseBytes
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
IsNetworkOrderInternal

PlayerInputPacket (0xB9)

Hex	0xB9
ID	185

Structure

Type
WriteBits
WriteBits
ReverseBytes
WriteBits
IsNetworkOrderInternal
ReverseBytes
WriteBits
IsNetworkOrderInternal

FullChunkDataPacket (0xBA)

Hex	0xBA
ID	186

Structure

Type
Write

Sounds

Names
random.splash
random.explode
random.click
random.break
random.burp
fire.fire
fire.ignite
random.door_open
random.door_close
random.chestclosed
random.chestopen
random.pop
random.pop2
random.hurt
mob.pigdeath
mob.chickenhurt
mob.cow
mob.zombie
mob.skeleton
mob.skeletonhurt
Continued on next page

Table 1.7 – continued from previous page

Names
mob.zombiedeath
mob.zombiepig.zpig
mob.zombiepig.zpigangry
mob.spiderdeath
damage.fallbig
mob.zombiepig.zpigdeath
damage.fallsmall
random.bow
random.eat
mob.creeperdeath
random.fuse
mob.villager.death
mob.enderman.scream
mob.wolf.panting
mob.wolf.death
mob.enderman.portal
mob.enderman.hit
mob.silverfish.hit
mob.wolf.hurt
mob.wolf.shake
mob.slime.small
mob.enderman.death
mob.slime.big
mob.enderman.stare
mob.silverfish.kill
mob.wolf.whine

Tiles

Names
stone
grass
still_water
cobblestone
stonebrick
wood
sapling
bedrock
water
lava
gravel
sand
leaves
gold_ore
oreGold
iron_ore
oreIron
coal_ore

Continued on next page

Table 1.8 – continued from previous page

Names
oreCoal
log
glass
lapis_ore
oreLapis
lapis_block
blockLapis
sandstone
sandStone
bed
goldenRail
deadbush
cloth
mushroom
flower1
flower2
mushroom_brown
mushroom_red
gold_block
blockGold
iron_block
stoneSlab
blockIron
brick
tnt_side
tnt
planks
cobblestone_mossy
stoneMoss
obsidian
torch_on
torch
mob_spawner
mobSpawner
stairsWood
chest
diamond_ore
oreDiamond
diamond_block
blockDiamond
workbench
wheat
crops
farmland
doorWood
ladder
rail
stairsStone
doorIron

Continued on next page

Table 1.8 – continued from previous page

Names
oreRedstone
snow
ice
cactus
clay
reeds
fence
pumpkin
netherrack
hellrock
glowstone
lightgem
litpumpkin
cake
trapdoor
monsterStoneEgg
stonebricksmooth
iron_bars
fenceiro
glass_pane_top
thinGlass
melon
pumpkinStem
vine
fenceGateOak
stairsBrick
mycel
waterlily
endPortalFrame
end_stone
whiteStone
cocoa
emerald_ore
oreEmerald
emerald_block
woodSlab
blockEmerald
stairsWoodSpruce
stairsWoodBirch
stairsWoodJungle
stairsStoneBrickSmooth
nether_brick
netherBrick
stairsNetherBrick
stairsSandStone
cobbleWall
carrots
potatoes
quartzBlock

Continued on next page

Table 1.8 – continued from previous page

Names
stairsQuartz
stained_clay
clayHardenedStained
leaves2
hayBlock
woolCarpet
coal_block
blockCoal
stairsWoodAcacia
stairsWoodBigOak
hardened_clay
clayHardened
ice_packed
icePacked
doublePlant
fenceGateSpruce
fenceGateBirch
fenceGateJungle
fenceGateDarkOak
fenceGateAcacia
podzol
beetroot
stonecutter
glowing_obsidian
glowingobsidian
reactor_core
netherreactor
info_update
dirt
stained_hardened_clay
double_plant
tallgrass
brownHugeMushroom
redHugeMushroom

1.3 v0.9.*

1.4 v0.8.*

1.5 v0.7.*

1.6 v0.6.*

1.7 v0.5.*

1.8 v0.4.*

1.9 v0.3.*

1.10 v0.2.*

1.11 v0.1.*

1.11.1 v0.1.0 Build 0

Created	Fri Aug 19 10:13:46 2011
MD5	6a33f66f6f1d2655feee70646fda8353
SHA1	e0273784f3c75a398c7b0a50f18ad4414baedeb8

- *Packet information*
- *Sounds*

Packet information

- *LoginPacket (0x86)*
- *MessagePacket (0x87)*
- *StartGamePacket (0x88)*
- *AddPlayerPacket (0x89)*
- *RemoveEntityPacket (0x8A)*
- *MovePlayerPacket (0x8B)*
- *PlaceBlockPacket (0x8C)*
- *RemoveBlockPacket (0x8D)*

- *UpdateBlockPacket (0x8E)*
- *RequestChunkPacket (0x8F)*
- *ChunkDataPacket (0x90)*
- *PlayerEquipmentPacket (0x91)*

Protocol version:

LoginPacket (0x86)

ID: 134
Hex: 0x86

Structure

Type
Serialize

MessagePacket (0x87)

ID: 135
Hex: 0x87

Structure

Type
Serialize

StartGamePacket (0x88)

ID: 136
Hex: 0x88

Structure

Type
Write<long>
Write<int>
Write<int>
Write<float>
Write<float>
Write<float>

AddPlayerPacket (0x89)

ID: 137
Hex: 0x89

Structure

Type
Write<ulong long>
Serialize
Write<int>
Write<float>
Write<float>
Write<float>

RemoveEntityPacket (0x8A)

ID: 138
Hex: 0x8A

Structure

Type
Write<int>

MovePlayerPacket (0x8B)

ID: 139
Hex: 0x8B

Structure

Type
Write<int>
Write<float>
Write<float>
Write<float>
Write<float>
Write<float>
Write<float>

PlaceBlockPacket (0x8C)

ID: 140
Hex: 0x8C

Structure

Type
Write<int>
Write<int>
Write<int>
WriteBits
WriteBits
WriteBits

RemoveBlockPacket (0x8D)

ID: 141
Hex: 0x8D

Structure

Type
Write<int>
Write<int>
Write<int>
WriteBits

UpdateBlockPacket (0x8E)

ID: 142
Hex: 0x8E

Structure

Type
Write<int>
Write<int>
WriteBits
WriteBits
WriteBits

RequestChunkPacket (0x8F)

ID: 143
Hex: 0x8F

Structure

Type
Write<int>
Write<int>

ChunkDataPacket (0x90)

ID: 144
Hex: 0x90

Structure

Type
Write<int>
Write<int>
Reset
WriteBits
Write
Write
Write

PlayerEquipmentPacket (0x91)

ID:	145
Hex:	0x91

Structure

Type
Write<int>
WriteBits

Sounds

Names
step.cloth
step.grass
step.gravel
step.sand
step.stone
step.wood
random.splash
random.explode
random.click

1.11.2 v0.1.1 Build 0

Created	Fri Oct 7 21:35:54 2011
MD5	bdd26f376a24f77a6020f1727929e413
SHA1	7b874c3afc913ea97c062c3e18ae2e56dd735722

• <i>Biomes</i> • <i>Items</i> • <i>Packet information</i> • <i>Sounds</i> • <i>Tiles</i>

Biomes

Names
Rainforest
Swampland
Seasonal Forest
Forest
Savanna
Shrubland
Taiga
Desert
Plains
Ice Desert
Tundra

Items

Names
arrow
emerald
ingotIron
ingotGold
stick
bowl
string
feather
sulphur
wheat
doorWood
doorIron
leather
brick
clay
reeds
paper
book
slimeball
compass
clock
yellowDust
bone
sugar
camera

Packet information

- *LoginPacket (0x86)*
- *MessagePacket (0x87)*

- *StartGamePacket (0x88)*
- *AddPlayerPacket (0x89)*
- *RemoveEntityPacket (0x8A)*
- *MovePlayerPacket (0x8B)*
- *PlaceBlockPacket (0x8C)*
- *RemoveBlockPacket (0x8D)*
- *UpdateBlockPacket (0x8E)*
- *RequestChunkPacket (0x8F)*
- *ChunkDataPacket (0x90)*
- *PlayerEquipmentPacket (0x91)*

Protocol version:

LoginPacket (0x86)

ID: 134
Hex: 0x86

Structure

Type
Write<RakString>

MessagePacket (0x87)

ID: 135
Hex: 0x87

Structure

Type
Write<RakString>

StartGamePacket (0x88)

ID: 136
Hex: 0x88

Structure

Type
Write<long>
Write<int>
Write<int>
Write<float>
Write<float>
Write<float>

AddPlayerPacket (0x89)

ID: 137
Hex: 0x89

Structure

Type
Write<RakNetGUID>
Write<RakString>
Write<int>
Write<float>
Write<float>
Write<float>

RemoveEntityPacket (0x8A)

ID: 138
Hex: 0x8A

Structure

Type
Write<int>

MovePlayerPacket (0x8B)

ID: 139
Hex: 0x8B

Structure

Type
Write<int>
Write<float>
Write<float>
Write<float>
Write<float>
Write<float>

PlaceBlockPacket (0x8C)

ID: 140
Hex: 0x8C

Structure

Type
Write<int>
Write<int>
Write<int>
Write<uchar>
Write<uchar>
Write<uchar>

RemoveBlockPacket (0x8D)

ID: 141
Hex: 0x8D

Structure

Type
Write<int>
Write<int>
Write<int>
Write<uchar>

UpdateBlockPacket (0x8E)

ID: 142
Hex: 0x8E

Structure

Type
Write<int>
Write<int>
Write<uchar>
Write<uchar>
Write<uchar>

RequestChunkPacket (0x8F)

ID: 143
Hex: 0x8F

Structure

Type
Write<int>
Write<int>

ChunkDataPacket (0x90)

ID: 144
Hex: 0x90

Structure

Type
Write<int>
Write<int>
Reset
Write<uchar>
Write
Write
Write

PlayerEquipmentPacket (0x91)

ID: 145
Hex: 0x91

Structure

Type
Write<int>
Write<uchar>

Sounds

Names
step.cloth
step.grass
step.gravel
step.sand
step.stone
step.wood
random.splash
random.explode
random.click

Tiles

Names
sand
sandStone
stonebrick
brick
wood
glass
water
lava
gravel
stone
bedrock

Continued on next page

Table 1.9 – continued from previous page

Names
dirt
grass
ice
clay
farmland
stoneSlab
cloth
flower
rose
mushroom
snow
log
leaves
oreDiamond
oreRedstone
oreGold
oreIron
oreCoal
oreLapis
reeds
ladder
obsidian
tnt
torch
fire
blockGold
blockIron
blockDiamond
stairsWood
stairsStone
doorWood
doorIron

1.11.3 v0.1.2 Build 0

Created	Thu Oct 13 21:45:14 2011
MD5	eea48294ca763591e0ea6096a1a48948
SHA1	523ff7962b984322dd7d71788fb0ff931c5c4e64

- *Packet information*
- *Sounds*

Packet information

- *LoginPacket (0x86)*
- *MessagePacket (0x87)*
- *StartGamePacket (0x88)*
- *AddPlayerPacket (0x89)*
- *RemoveEntityPacket (0x8A)*
- *MovePlayerPacket (0x8B)*
- *PlaceBlockPacket (0x8C)*
- *RemoveBlockPacket (0x8D)*
- *UpdateBlockPacket (0x8E)*
- *RequestChunkPacket (0x8F)*
- *ChunkDataPacket (0x90)*
- *PlayerEquipmentPacket (0x91)*

Protocol version:

LoginPacket (0x86)

ID: 134
Hex: 0x86

Structure

Type
Serialize

MessagePacket (0x87)

ID: 135
Hex: 0x87

Structure

Type
Serialize

StartGamePacket (0x88)

ID: 136
Hex: 0x88

Structure

Type
Write<long>
Write<int>
Write<int>
Write<float>
Write<float>
Write<float>

AddPlayerPacket (0x89)

ID: 137
Hex: 0x89

Structure

Type
Write<ulong long>
Serialize
Write<int>
Write<float>
Write<float>
Write<float>

RemoveEntityPacket (0x8A)

ID: 138
Hex: 0x8A

Structure

Type
Write<int>

MovePlayerPacket (0x8B)

ID: 139
Hex: 0x8B

Structure

Type
Write<int>
Write<float>
Write<float>
Write<float>
Write<float>
Write<float>

PlaceBlockPacket (0x8C)

ID: 140
Hex: 0x8C

Structure

Type
Write<int>
Write<int>
Write<int>
WriteBits
WriteBits
WriteBits

RemoveBlockPacket (0x8D)

ID: 141
Hex: 0x8D

Structure

Type
Write<int>
Write<int>
Write<int>
WriteBits

UpdateBlockPacket (0x8E)

ID: 142
Hex: 0x8E

Structure

Type
Write<int>
Write<int>
WriteBits
WriteBits
WriteBits

RequestChunkPacket (0x8F)

ID: 143
Hex: 0x8F

Structure

Type
Write<int>
Write<int>

ChunkDataPacket (0x90)

ID: 144
Hex: 0x90

Structure

Type
Write<int>
Write<int>
Reset
WriteBits
Write
Write
Write

PlayerEquipmentPacket (0x91)

ID: 145
Hex: 0x91

Structure

Type
Write<int>
WriteBits

Sounds

Names
step.cloth
step.grass
step.gravel
step.sand
step.stone
step.wood
random.splash
random.explode
random.click