

# Warehouse File Format

A warehouse file contains the following structures:

## ***Container***

uint16	Width
uint16	Length
uint16?	Height
string	Name
uint32?	MaxWeight
uint32?	TareWeight
Array of Rack	Racks

## ***Rack***

uint16	Width
uint16	Length
uint16?	Height
string	Name
uint32?	MaxWeight
Array of Placement	Placements

## ***Placements***

uint16	X
uint16	Y
uint8	ContentType
	1 for Container
	2 for Item
	3 for Packet
<content type>	Content

## ***Item***

uint16	Width
uint16	Length
uint16	Height
string	CatalogNumber
string	SerialNumber
uint32	Weight

## ***Packet***

uint16	Width
uint16	Length
uint16	Height

string	CatalogNumber
uint16	Capacity
uint32	ItemWeight
uint16	Quantity

The encoded types are:

- uint8
  - 1-byte unsigned integer
- uint16
  - 2-byte unsigned integer
- uint32
  - 4-byte unsigned integer
- uint16?
  - 2-byte unsigned integer
  - or
  - 0xFFFF as null
- uint32?
  - 4-byte unsigned integer
  - or
  - 0xFFFFFFFF as null
- string
  - uint16 size
  - <size> bytes of utf-8 encoded string
- Array of <type>
  - uint16 count
  - <count> repetitions of <type>

The file starts with a Content of a Container, i.e.:

uint8	ContentType = 1 (Container)
Container	Content