AtolaScript cheat sheet

AtolaScript is a greatly simplified version of C#/Java languages. Its every line can have only one command or expression.

Features

Feature	Example
Every variable can be initialized in 2 ways only: 1. Constant value or expression 2. Command call	`1. myVar = 256` `2. myRes = LastLBA`

One line can have only one instruction:
1. Command call
2. Variable assignation
3. if, while, for, foreach construction header
4. One-line comment
	`1. Compare FF`
	`2. myStr = "Hello world!"`
	`3. if (myVar > 100)`
	`4. // My simple comment line`

Every command assigns its result to the internal **LastResult** variable.
The variable's type is Result. Result fields are described below.
	`LastLba`
	`if (LastResult.Number == 0)`
	`  Print "Device has a zero capacity"`

if conditions and **while** , **for** , **foreach** cycles are available in C# syntax.	r = **Identify**
	spaceCount = 0
	for (i = 0; i < 512; i += 2)
	  if (r.Bytes[i] == 0x20)
	  spaceCount++

Variable types

Variable type	Details	Example

Boolean	There are synonyms for boolean values:
	1) true, on, yes, y
	2) false, off, no, n
		`isLargerThan80GB = no`
		`sizeOf80GB = 80000000000`
		`DeviceSize`
		`if (LastResult.Number > sizeOf80GB)`
		`  isLargerThan80GB = yes`

Number (64 bit)	Decimal and HEX values allowed.
	Hex values are prefixed with **0x.**
		`res = ReadNativeMaxAddress`
		`if (res.Number > 0x10000000 || res.Number < 0)`
		`  Print "Invalid HPA:" res.Number`

String	Multiword strings must be quoted. Quotes for single word strings can be omitted.	`Hash "md5 sha1" 0 10000` `Print Finished!`

Byte array	Requires specifying the size of the array on creation.	`bytes = new byte [512]`
		`bytes[0] = 0xFF`
		`bytes[1] = 0x40`

Result	Result variable can be created only by command call. It contains 2 types of fields.
	Data fields: Bytes, Number, Text, Blocks, Strings
	Command result fields: OK, Error, Timeout, Aborted
		readRes = **ReadSectors** 0 0
		if (readRes.Timeout)
		{
		  Print "Timeout at sector 0"
		  Scan linear 0 0
		}
		if (readRes.OK)
		  Print readRes.Bytes
		if (readRes.Error)
		  Erase 00 0 0

String array	String array can only be returned via Result.Strings field by Find, FindHEX, FindWords, and Hash commands.	`FindWords "Pete Jane Andrew" 0 10000`
		`foreach (name in LastResult.Strings)`
		`  Print name`

Block array	Block array can only be returned via Result.Blocks field by several long-running commands like Compare, Erase, etc. Every Block represents LBA interval and has 3 internal fields: * First * Last * Count	`Compare 1F` `Print LastResult.Blocks`

You can find more information about script commands in the script editor.
Move a caret to a new empty line and click 'Plus' sign appeared near the caret.