

# ARMA 3 SQF Cheat Sheet

## Conditionals

```

if (CONDITION) then {BLOCK} else {BLOCK}
if (CONDITION) exitWith {BLOCK}
switch (EXPRESSION) do {
    case VALUE ;
    case VALUE : {BLOCK} ;
    default {BLOCK} ;
}

```

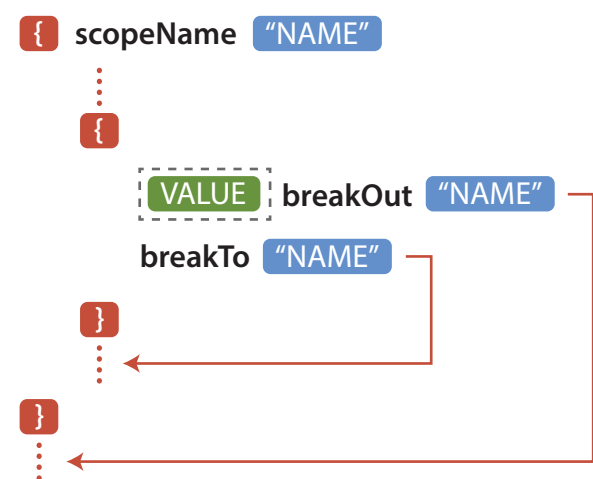
## Iteration

```

while {CONDITION BLOCK} do {BLOCK}
for [ {BEFORE} , {CONDITION BLOCK} , {AFTER} ] do {BLOCK}
for "VARIABLE" from START to FINISH step STEP do {BLOCK}
{BLOCK} forEach (EXPRESSION) _x _forEachIndex
waitUntil {CONDITION BLOCK}

```

## Breaking Scopes



## Locality

hasInterface player  
isServer server  
!(isServer || hasInterface) headless  
isDedicated should almost never be used  
isMultiplayer  
local object true for local objects

## Exceptions

```

try {
    throw VALUE
}
catch {BLOCK} _exception

```

returns try block value if no exception was thrown, catch block value otherwise.

## Types

any isEqualTo any more general than ==  
isNil "variable" variable undefined  
isNil code result undefined  
isNull object object deleted  
nil undefines variable if assigned  
typeof object CfgVehicles name  
any typeName any "STRING", "BOOL", ...  
array isEqualType any  
array isEqualTypeAll array all lhs are rhs type  
array isEqualTypeAny array all lhs are one of rhs types  
array isEqualTypeArray array set of types are equal  
array isEqualTypeParams array pairwise type comparison

⊕ Indicates that the selected block value (for if and switch) or the final block value (for loops) is returned, or nil if no block was executed.

## Parameters

```

array_this params [parameters ...]
each parameter "_local"
or ["_local", default nil, types-array any, array-sizes any]
type name strings ARRAY DISPLAY SCRIPT
                        BOOL GROUP SIDE
                        CODE LOCATION STRING
                        CONFIG OBJECT TEXT
                        CONTROL SCALAR NAMESPACE

```

## Functions

```

class CfgFunctions {
    class Tag {
        class Category {
            file = "path"; defaults to "functions\Category"
        }
        class Name {} ...
    }
}

```

loads from \path\fn\_Name.sqf  
called as Tag\_fnc\_Name

arguments nil remoteExec [functionName, targets all, jip no]

targets owner-id execute on node id  
- owner-id all excluding node id  
object where object is local  
side where player is on side  
group where player is on group  
array combination of the above

special owner-id's 0 all including caller  
2 server

jip true, unique-id, object, group or net-id

for unscheduled remoteExecCall same arguments as remoteExec

## Strings

format [format, values ...] "%1 is first"  
any isEqualTo any A≠a  
isLocalized message-name  
array joinString separator  
loadFile file-name  
localize message-name  
string select [index, count]  
string select [index] index to string end  
string splitString delimiters  
str value  
toArray string  
toLower string  
toString array inverse of toArray  
toUpper string  
string + string  
string == string A≠a

## (CONDITION)

Conditions for if and switch typically (but don't always) require parenthesis due to the precedence rules.

## Numbers

trigonometric functions take degrees

abs number  
x atan2 y  
deg radians  
finite number  
number max number  
number min number  
number mod number  
rad degrees  
random maximum  
parseNumber string  
round, ceil, floor,  
acos, asin, atan, cos, exp,  
ln, log, pi, sin, sqrt, tan number

## Vectors

three element arrays required

vector vectorAdd vector  
vector vectorCos vector cosine of angle  
vector vectorCrossProduct vector  
vector vectorDiff vector subtraction  
vector vectorDistance vector  
vector vectorDistanceSqr vector  
vector vectorDotProduct vector  
vector vectorFromTo vector unit vector  
vector vectorMagnitude vector  
vector vectorMagnitudeSqr vector  
vector vectorMultiply scalar  
vector vectorNormalized vector

## Arrays

array append array in place  
array apply function defines \_x  
array arrayIntersect array A≠a  
count array  
condition count array defines \_x  
array deleteAt index  
array deleteRange [index, count]  
array find value A≠a  
value in array A≠a value is non-array  
array isEqualTo any A≠a  
array pushBack value  
array pushBackUnique value  
array resize count  
reverse array  
array select index  
array select boolean  
array select [index, count]  
array select condition defines \_x  
array selectRandom array  
array set [index, value]  
array sort boolean true for ascending  
+ array deep copy of array  
array + array  
array - array A≠a sub-arrays not compared

## optional part optional-argument default-value

Optional parts and optional command arguments are shown as above.

## Precedence

Lowest	1	or
	2	&& and
	3	== != > < >= <= >>
	4	All other binary operators.
	5	else
	6	+ - max min
	7	* / % mod atan2
	8	^
Highest	9	All unary operators.

## Configs

conditions are strings, passed config in \_x

condition configClasses config  
configFile root config  
configHierarchy config array of superclasses  
configName config  
configProperties [config, condition true, inherit true]  
configSourceMod config created by mod  
configSourceModList config edited by mods  
getArray config  
getMissionConfig name sqm or description.ext  
getMissionConfigValue name sqm or description.ext  
getNumber config  
getText config  
inheritsFrom config superclass of config  
isArray config  
isClass config  
object isKindOf name for CfgVehicles, CfgAmmo  
name isKindOf name for CfgVehicles, CfgAmmo  
name isKindOf [name, config]  
isNumber config  
isText config  
missionConfigFile description.ext root config  
config >> name low precedence, always use parenthesis  
config == config isEqualTo also works



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