

Tactical Combat Link - (TypeX) Beta v.1.0.19

Description:

Tactical Combat Link is a highly dynamic A.I. and F.X. enhancement modification for ARMA 3.

The main focus of Tactical Combat Link is to enhance and improve A.I. in many different ways and situations.

Tactical Combat Link gives mission designers full freedom about the control and behaviour of A.I. unit(s) and A.I. group(s) by providing multiple types and ways of how A.I. unit(s) and A.I. group(s) can be initialized and behave.

Tactical Combat Link works as close as possible with the ARMA 3 engines native A.I. behaviours to keep a good and clean A.I. mission flow.

The main system and almost every feature of Tactical Combat Link use highly randomized values to create unique and varied combat situations.

Tactical Combat Link was designed to be as realistic as possible!

A.I. is able to react to each enemy player(s) (playable / switchable) individual which means it is possible to have Player(s) vs A.I. combat in almost every kind and situation.

Since version **1.0.17** it is possible to use all features of Tactical Combat Link in A.I. vs A.I. combat situations as well.

Each A.I. group has the ability to start their own reinforcement request cycle.

A.I. unit(s) of Tactical Combat Link have been specialized and optimized for close and long range combat.

Tactical Combat Link has been optimized by using some of the latest coding and syntax optimizations to provide solid and lag free missions.

A.I. Reinforcement Features:

A.I. Helicopter Paratroop

A.I. Request Reinforcement

A.I. Request Artillery Support

A.I. Assign / Unassign Vehicles

A.I. Combat Features:

A.I. Sneaking

A.I. Fire Flares

A.I. use Smoke

A.I. Take Cover

A.I. do House Search

A.I. use Static Weapons

A.I. use Tactical Movement

A.I. use Flanking Maneuvers

A.I. use Dynamic Push Movement

A.I. use Cover to Cover Movement

A.I. use Dynamic Combat Movement

A.I. do Helicopter Insertion / Extraction

A.I. I.Q. Features:

A.I. React to Weapon Fire

A.I. React to Suppressive Fire

A.I. Intelligence Communication

A.I. React to Vehicle Explosions

A.I. Real Time Enemy Response and Reaction

A.I. Real Time Combat Response and Reaction

A.I. Dynamic Behaviour Assignment and Switching

A.I. Dynamic Enemy Assignment and Enemy Switching

A.I. I.d.I.e. Features:

A.I. Area Observation

A.I. Garrison Buildings

A.I. Special Behaviour:

A.I. group(s) which use combat mode "**RED**" will behave more offensive and always try to push their enemy(s) as much as possible.

A.I. group(s) which use combat mode "**YELLOW**" will behave more defensive push their enemy(s) less and stay in cover much longer.

Tactical Combat Link will randomly set the A.I. group(s) combat mode if not already set by the mission designer.

To force A.I. group(s) to use the most aggressive behaviour write **<this setCombatMode "RED">** in the A.I. group(s) composition init line or **<group this setCombatMode "RED">** in any A.I. unit(s) init line without "**< >**".

F.X. Features:

Church Chor

Explosion F.X.

Lighthouse Horn

Shell Whiz By F.X.

Bullet Whiz By F.X.

Influences:

Tactical Combat Link has been greatly inspired by some of my personal most favorite modifications Group Link 2 and E.C.P. (Enhanced Configuration Project) which was developed for B.I.S. Operation Flashpoint - Cold War Crisis today known as ARMA: Cold War Assault.

Note:

So far i did not try any combination with other none official AddOns / Mods to prevent any kind of conflict.

Please keep in mind that this version of Tactical Combat Link is some kind of Beta / W.I.P. only which still is missing almost every documentation and some external setting files.

So far the main A.I. systems and features are working properly but of course developing, testing and debugging still is going on in many parts of it.

Spawning:

Tactical Combat Link fully supports and automatically initialize spawned A.I. unit(s) A.I. group(s) Vehicles and playable / switchable unit(s).

Multiplayer:

Tactical Combat Link has been successfully tested in multiplayer environment on local hosted and dedicated server hosted sessions using the default B.I.S. Revive system.

Install:

There are 2 ways of how you can install Tactical Combat Link.

1.) AddOn: (Based)

Copy the **@TCL** and **UserConfig** folder into your ARMA 3 game root folder.

Start ARMA 3 with: -filePatching -mod=@TCL

Note: If you don't use -filePatching you will not be able to use the settings provided in the UserConfig > TCL folder.

Multiplayer:

Tactical Combat Link can be installed on the local hosted / dedicated server only.

In this case clients which join the host / dedicated server and do not have Tactical Combat Link installed won't be able to use the Explosion F.X. and Sound F.X. features.

2.) Script: (Based)

UnPbo the **TCL_System.pbo** in "**@TCL\AddOns**" and copy the unPboed "**TCL_System**" folder into your mission root folder.

Create a **Init.sqf** in your mission root folder and write (copy > past) the following 2 lines into your created **Init.sqf** to initialize Tactical Combat Link script based.

```
TCL_Path = "TCL_System\";
```

```
call compile preprocessFileLineNumbers (TCL_Path+"TCL_Preprocess.sqf");
```

Note: If you like to change settings of Tactical Combat Link directly from your mission Init.sqf make sure to set **<TCL_Initialize = True;>** after your changes.

Example: (Init.sqf)

```
TCL_Debug = [False, True, True, True, False, True, False];
```

```
TCL_Initialize = True;
```

Setup:

1. Create player unit(s) / group(s) in Eden Editor.

Note:

The A.I. combat system of Tactical Combat Link will react to playable and switchable unit(s) only!

Since version **1.0.17** it is possible to use all features of Tactical Combat Link in A.I. vs A.I. combat situations as well.

This means it is possible to have any A.I. side vs any Player side enemy to the A.I. and A.I. vs A.I. at the same time and during the whole mission.

2. Create A.I. unit(s) / group(s) enemy to the player unit(s) / group(s) in Eden Editor.

That's the basic setup to start a Tactical Combat Link mission.

A.I. Group Settings:

Each A.I. group which was initialized by Tactical Combat Link gets a variable assigned where the default A.I. group reinforcement request behaviour settings are stored in.

The variable can be accessed with `<group getVariable "TCL_AI";>` without "< >".

This variable use all values of the "TCL_AI" setting file from "UserConfig\TCL\TCL_AI" in given order.

This is how the default variable of A.I. group(s) initialized by Tactical Combat Link looks like:

New = Red

Changed = Blue

TCL_AI = [0.1, 0.15, 3, [3000, 5000, 7000, 10000, 13000], False, 4, 700, True, False, False, True, 170, 2, False];

This is how to set and change these settings for individual A.I. group(s) in the editor.

1.) A.I. Group Composition Init Line:

In the A.I. group(s) composition init line write:

```
this setVariable ["TCL_AI", [0.1, 0.15, 3, [3000, 5000, 7000, 10000, 13000], False, 4, 700, True, False, False, True, 170, 2, False] ];
```

2.) A.I. Unit Init Line:

Choose 1 A.I. unit of a A.I. group and write

```
group this setVariable ["TCL_AI", [0.1, 0.15, 3, [3000, 5000, 7000, 10000, 13000], False, 4, 700, True, False, False, True, 170, 2, False] ];
```

in the A.I. unit(s) init line.

A.I. Group Types:

Tactical Combat Link allows you to set up specific A.I. Group Types which make A.I. group(s) behave in different ways.

1.) Combat A.I. Groups:

Combat A.I. Groups are the default Tactical Combat Link A.I. group(s) which will be used by default and which use the full range of Tactical Combat Link features.

They can request reinforcement(s) and can be requested as reinforcement.

Also Combat A.I. Groups may leave their position after detecting gunfire or explosions.

2.) Hold A.I. Groups: (TCL_Hold)

Hold A.I. Groups are used to protect or secure a specific area or object.

They can NOT be requested as reinforcement but can request other NONE Hold A.I. Groups as reinforcement(s).

Also Hold A.I. Groups will NOT leave their position even after detecting gunfire or explosions.

Hold A.I. Groups are NOT allowed to leave their position.

By default Hold A.I. Groups movement range will be limited to 50 x 50 meters.

You can modify (increase / decrease) the default Hold A.I. Groups movement range by creating a trigger and write <TCL_Hold> without "< >" into the trigger text field and set the trigger area (range) to whatever you like. Place the A.I. group(s) which should be initialized as Hold A.I. Groups within the trigger area.

Hold A.I. Groups are only allowed to interact with objects which are within the Hold A.I. Groups movement range.

3.) Defend A.I. Groups: (TCL_Defend)

Defend A.I. Groups follow exactly the same rules as Hold A.I. Groups with one exception! Defend A.I. Groups are ALLOWED to leave their position after detecting enemy(s).

4.) Custom A.I. Groups: (TCL_Custom)

Custom A.I. Groups are used to initialize some specific A.I. group(s) only.

By default Custom A.I. Groups follow exactly the same rules as Combat A.I. Groups.

If Custom A.I. Groups are used Hold, Defend and Location A.I. Groups will be initialized automatically.

5.) Location A.I. Groups:

Location A.I. Groups can be created by synchronizing A.I. groups with each other.

You only have to synchronize 1 unit of a A.I. group with another unit of another A.I. group to create Location A.I. Groups.

Location A.I. Groups follow the same rules as Combat A.I. Groups but they can only request and be requested by A.I. groups which was synchronized with them.

A.I. Group Types: (Special)

The special A.I. group types of Tactical Combat Link allows you to set up specific A.I. Group Types which disable specific A.I. group(s) behaviours.

Those Special A.I. Group Types has been introduced to reduce and stop Tactical Combat Link from breaking missions by moving or requesting reinforcement(s) A.I. group(s) which are supposed to not use any of those features.

1.) I.D.L.E. A.I. Groups: (TCL_IDLE)

I.D.L.E. A.I. Groups are used to exclude specific A.I. group(s) from A.I. vs A.I. combat.

2.) Freeze A.I. Groups: (TCL_Freeze)

Freeze A.I. Groups will use all Tactical Combat Link combat behaviours but will not move to any position.

Also Freeze A.I. Groups will not advance after detecting gunfire or explosions.

They are totally excluded from all Tactical Combat Link movement systems.

3.) Default A.I. Groups: (TCL_Default)

Default A.I. Groups are not able to request reinforcement(s) and can not be requested as reinforcement(s).

They are totally excluded from the Tactical Combat Link reinforcement requests system.

4.) Enhanced A.I. Groups: (TCL_Enhanced)

Enhanced A.I. Groups will be excluded from all Tactical Combat Link reinforcement request and movement systems but will use all A.I. combat behaviour features e.g. "Take Cover" "Suppressed Fire" and "Static Weapon".

Initialize: (Hold A.I. - Defend A.I. - Custom A.I. - Disabled A.I. - I.d.I.e. A.I. - Freeze A.I. - Default A.I. - Enhanced A.I.)

There are different ways of how to initialize A.I. group(s) with those specific A.I. group types.

The examples below are made for Hold A.I. Groups.

To initialize Defend A.I. Groups use "**TCL_Defend**" for Custom A.I. Groups use "**TCL_Custom**" for Disabled A.I. Groups use "**TCL_Disabled**" for I.d.I.e. A.I. Groups use "**TCL_Idle**" for Freeze A.I. Groups use "**TCL_Freeze**" for Default A.I. Groups use "**TCL_Default**" and for Enhanced A.I. use "**TCL_Enhanced**" instead.

1.) A.I. Group Composition Init Line:

In the A.I. group(s) composition init line write `<this setVariable ["TCL_Hold", True];>` without "< >" to initialize the A.I. group as Hold A.I. Group.

Note: This way also can be used to initialize spawning A.I. unit(s) and A.I. group(s) with any group types.

2.) A.I. Unit Init Line:

Choose 1 A.I. unit of a A.I. group and write `<group this setVariable ["TCL_Hold", True];>` without "< >" in the init line of the A.I. unit to initialize the A.I. group of the A.I. unit as Hold A.I. Group.

Note: This way also can be used to initialize spawning A.I. unit(s) and A.I. group(s) with any group types.

3.) Trigger Text Line:

Create a trigger in Eden Editor.

In the text line of the created trigger write `<TCL_Hold>` without "< >".

Synchronize 1 A.I. unit of a A.I. group with the trigger to initialize the A.I. group of the synchronized A.I. unit as Hold A.I. Group.

Note: You can create as much triggers as you like or synchronize multiple A.I. unit(s) of different A.I. group(s) with the same trigger.

4.) Trigger Area Size:

Create a trigger in Eden Editor.

In the text line of the created trigger write `<TCL_Hold>` without "< >".

Set the trigger area size to what area you like to cover.

Place the trigger over the given A.I. group(s) to initialize A.I. group(s) within the trigger area as Hold A.I. Group(s).

A.I. Group Type Priorities:

To prevent A.I. group(s) from accidentally initializing in multiple A.I. Group Types the A.I. group(s) initialize use a priority system.

Priority 1: setVariable

Priority 2: Synchronized Triggers

Priority 3: Trigger Area

Credits:

Group Link I

(O.F.P.) (Toadlife)

Group Link II

(O.F.P.) (B.I.S., Toadlife, KeyCat, Kriegerdaemon, Kegetys, BAS, Amalfi, OFPEC.com, Suchey & Earl, Silola, KTottE and everyone else that makes OFP keep going!)

Group Link 2 Plus!

(ARMA 1) (B.I.S., Toadlife, KeyCat, E.C.P. Team, Sgt.Ace, ZoneKiller, KyleSarnik, Solus, Mapfact.net Team)

Group Link 3

(ARMA 1) (B.I.S., Toadlife, KeyCat, E.C.P. Team, Sgt.Ace, ZoneKiller, KyleSarnik, Solus, Mapfact.net Team)

Group Link 4 - Special F.X. Edition

(ARMA 2) (B.I.S., Toadlife, KeyCat, E.C.P. Team, Sgt.Ace, ZoneKiller, KyleSarnik, Solus, Mapfact.net Team)

Tactical Combat Link - TypeX

(ARMA 3) (B.I.S.,

Special Thanks:

Last but not least i would like to thank some special community members which really helped me a lot to understand and finally use the new scripting commands and syntaxes properly.

Of course the ARMA community has so much more highly skilled and always glad to help members but those listed below explained and shared their knowledge in almost every thread i was interested in.

Grumpy Old Man

serena

killzone_kid

cuel

.kju

and everyone who shared and contributed his knowledge to the [Code Optimization](#) topic.

Supporters:

Machiya

charlis

Leopard20

License:

Tactical Combat Link has been created for Bohemia Interactive Studios ARMA 3 (Armed Assault 3) the ARMA community and for free use only!

Please keep this modification as it is!

This modification has been Developed / Scripted / Tester by =\SNKMAN/=

Known Bugs: (Most of them engine related?)

As we all know ARMA is a very complex and highly moddable game.

Therefore it is just normal that not every single aspect of the game works as expected.

I have to say that B.I.S. did a very good job with ARMA 3 but of course during all my testing and debugging i discovered some bugs and unexplainable engine behaviours.

Well i spend weeks and months finding good solutions or workarounds to get rid of some of those bugs but most of them are very randomly which makes its really hard to tell what and why exactly they appear.

Guess i can tell pretty much the most of them are engine related and maybe will never get fixed.

Same old story... A.I. unit(s) / group(s) not properly following move orders...

A.I. unit(s) / group(s) get stuck...

A.I. unit(s) / group(s) fail to assign / unassign vehicles...

A.I. unit(s) driving and flying skills...

Sometimes A.I. units get stuck in buildings, rocks or any other map object.

A.I. unit(s) which was ordered to assign a vehicle and not able to assign the assigned vehicle because they are wounded or stuck after some time those A.I. unit(s) will leave their group which sometimes leads to a script syntax error.

A.I. unit(s) in vehicles where the A.I. group leader is not the driver of the vehicle sometimes refuse to move. (A.I. stuck workaround already is working but fails in some situations)

A.I. unit(s) sometimes refuse to attack (shoot) their enemy(s) from further distance.

A.I. unit(s) sometimes magically can spot their enemy(s) even if hidden inside of buildings or behind objects.

Sometimes A.I. unit(s) refuse to move at all. From what i can tell most of the time this happens if A.I. unit(s) have to move through mountain (rocky) areas. (Guess maybe fixed already...)

Found this especially on Malden where A.I. unit(s) are able to move straight into / through a mountain and then often get stuck right into it!

Pretty damn annoying stuff... :(

This is a non official AddOn, use at your OWN risks!