

Tributaries Framework Documentation

Revision: 2

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APP1. WHAT'S NEW IN REVISION 2

1. Removed and changed some of the scripted triggers and effects
2. Code was nearly fully rewritten
3. Fixed paradox caused bug that made unable to get income from tributaries

1. OVERVIEW AND CHANGED VANILLA FILES

Overview:

I created this framework for anyone to use, and this document so that even the most inexperienced modder can use it.

This mod was originally designed for the CK3 Four Nations project, which takes place in the world of Avatar. In it, the Earth Kingdom is a decentralized monarchy, and the base feudal system in CK3 does not do a proper job representing the relation between the Kingdom and its subjects.

Credits go to:

Tobbzn (one of lead devs of Way of Kings) and Keizerharm (lead dev of Sunset Invasion), for general advice on how to develop the mod

The T4N team (specifically in person of RadicalSquirell and ThatOneGuy)

JJsfw (one of project leads on the Elder Kings mod), who was designing his own framework, but ended up agreeing to help me finish this one.

TypicalCrusader 11th of June 2021

Things Implemented partially or not implemented by a time of 1.0

- Inheritance of tributary type to only Main Heir instead of all independent Heirs
- Tributary war with other Tributary causing reaction from a liege
- CB block for suzerain when trying to start war against his tributary
- Ability to define in Tributary template which tributary type is able to call to arms suzerain
- Possibly turning off map name of tributary countries to display suzerain title name over them
- Ability to see the monthly income from tributaries

Changed Vanilla Files:

window_character.gui – to show the tributaries

lists.gui

hud.gui

mapmodes.gui

value_breakdown.gui

map_modes.txt

All files from casus_belli_types – to include CB block

2. LIST OF ADDED ON ACTIONS, SCRIPTED TRIGGERS ,EFFECTS AND LISTS AND VARIABLE LISTS

2.1. On Actions

on_game_start_after_lobby

- T4N_on_monthly_tribute (gives monthly tribute to suzerain)

on_war_won_attacker

- T4N_tributaries_on_war_won_attacker (deals with tributaries \ suzerains who lost independence or are no longer a landed rulers)

on_title_lost

- T4N_tributaries_on_title_lost (deals with tributaries \ suzerains who lost independence or are no longer a landed rulers)

on_death

- T4N_tributaries_on_death (deals with assigning new suzerain, coping permanent tributaries list and assigning correct tributary type to new tributary)

2.2 Scripted Effects

make_tributary – Actually assigns correct tributary type

Arguments:

- TYPE = Tributary main type (look at 00_T4N_tributary_types)
- TRIBUTARY = SCOPE – CHARACTER – character which will be a tributary
- SUZERAIN = SCOPE – CHARACTER – character which will be a suzerain

define_tributary – this creates tributary and is assigning correct values based on “template” which is located in 00_T4N_tributary_types. **USE TEMPLATES TO ASSIGN VALUES NOT THIS**

Arguments:

- SUZERAIN = SCOPE – CHARACTER – **do not change, correct scope is assigned by make_tributary**
- TRIBUTARY = SCOPE – CHARACTER - **do not change, correct scope is assigned by make_tributary**
- TYPE = STRING – FLAG – **used for localization, and income purposes, assigned by make_tributary**
- TRIBUTARY_BASE_TYPE = STRING – FLAG – assigned by template, 2 possible values
 - flag:permanent
 - flag:non_permanent

- `TRIBUTE_GOLD_PERCENT` = VARIABLE VALUE – PERCENTAGE – How much of gold tributary pays to suzerain. Can be 0
- `MONTHLY_PRESTIGE_SUZERAIN` = VARIABLE VALUE – How much prestige does tributary give to suzerain on monthly basis. Can be 0
- `MONTHLY_PRESTIGE_TRIBUTARY` = VARIABLE VALUE - How much prestige does Tributary gain on monthly basis. Can be 0
- `MONTHLY_PIETY_SUZERAIN` = VARIABLE VALUE - How much piety does tributary give to suzerain on monthly basis. Can be 0
- `MONTHLY_PIETY_TRIBUTARY` = VARIABLE VALUE - How much piety does Tributary gain on monthly basis. Can be 0
- `MAN_AT_ARM_CAP_PER_TEN_SUBJECTS` = VARIABLE VALUE – How much Men at Arms suzerain gets per 10 subjects **Placeholder Right now will be implemented in 1.2.1**
- `MONTHLY_LEVY_REINFORCEMENT_RATE_PER_SUBJECT` - How much of levy reinforcement rate does suzerain gets per every subject **Placeholder Right now will be implemented in 1.2.1**
- `MONTHLY_LEVY_REINFORCEMENT_RATE_TRIBUTARY` - How much of levy reinforcement rate does tributary loses to\gains from suzerain **Placeholder Right now will be implemented in 1.2.1**
- `CAN_DECLARE_WAR_ON_TRIB_FLAG` = BOOL – FLAG – can suzerain declare war on tributaries
- `CAN_CALL_TO_WAR_SUZERAIN_FLAG` = BOOL – FLAG – can suzerain call to war his tributary
- `CAN_CALL_TO_WAR_TRIBUTARY_FLAG` = BOOL – FLAG – can tributary call to war his suzerain

`pass_tributary_type_to_heir` – Passes correct permanent type tributary onto new ruler

Put all of your permanent tributaries types (ie. those who stay after succession) here

Arguments:

- `SCOPE` = SCOPE- CHARACTER – Old Tributary
- `TYPE` = VARIABLE VALUE – FLAG – tributary type

- `TRIBUTARY = SCOPE – CHARACTER` – the character which is a new tributary
- `NEW_RULER = SCOPE – CHARACTER` – the character which is suzerain

`ruler_offer_tribute_to_recipient_effect` – Turns `scope:actor` into tributary based on selected option in character interaction of same name (minus `_effect`)

`offer_tribute_effect` – Turns `scope:recipient` into tributary based on selected option in character interaction of same name (minus `_effect`).

`unset_tributary` – self-explanatory unsets tributary (clears all vars and removes from var list)

Arguments:

`TRIBUTARY = SCOPE – CHARACTER` – Character who no longer will be a tributary

`TRIBUTARY_BASE_TYPE = VARIABLE VALUE – FLAG` – tributary base type, accepts only 2 flags: `flag:permanent` and `flag:non_permanent`

2.3 Scripted Triggers

`is_tributary` – checks if `prev (SCOPE – CHARACTER)` is a tributary of any type

`is_permanent_tributary` – checks if `TRIBUTARY` is permanent tributary of `SUZERAIN`

Arguments:

- `SUZERAIN = SCOPE – CHARACTER` – suzerain of tributary
- `TRIBUTARY = SCOPE – CHARACTER` –tributary of suzerain

`is_non_permanent_tributary` – checks if `TRIBUTARY` is non-permanent tributary of `SUZERAIN`

Arguments:

- `SUZERAIN = SCOPE – CHARACTER` – suzerain of tributary
- `TRIBUTARY = SCOPE – CHARACTER` –tributary of suzerain

`is_suzerain` – checks if character has any of two main tributary variable lists

`has_tributaries` – checks if Suzerain has any tributaries

`has_permanent_tributaries` – checks if Suzerain has any permanent tributaries

`has_non_permanent_tributaries` – checks if Suzerain has any non-permanent tributaries

`can_declare_war_on_tributary` - checks if tributary type allows suzerain to attack tributary

`can_declare_war_on_suzerain` – checks if character is tributary of targeted character

`casus_belli_block` – CB block, the thing that actually blocks you from declaring war on suzerain / tributary

2.4. Scripted and Variable Lists

Variable Lists

- `permanent_tributaries` – list of permanent tributaries
- `non_permanent_tributaries` – list of non-permanent tributaries
- `all_tributaries` – list of all tributaries, mainly used for gui

Scripted Lists

- `suzerain` – list of all suzerains in the world
- `tributary` - list of all tributaries in the world

3. USING THE FRAMEWORK

3.1 How Does it Work?

Tributaries work by simply using variables to create a relation between a tributary and suzerain. Tributaries hold information on income, tributary type, and who the suzerain is, and Suzerains hold information on who their tributaries are.

3.2. Setting Tributary

To set tributary you need to use scripted effect `make_tributary` in following way:

```
make_tributary = {  
    TYPE = Take from template  
    TRIBUTARY = scope of character you want to be an Tributary  
    SUZERAIN = scope of character you want to be an Suzerain  
}
```

This is all you need to set tributary .

3.3 Defining new tributary type

This is more tricky to define new tributary type you will need to create all new scripted effect in following way:

```
name_of_tributary_type = {
    define_tributary = {
        TRIBUTARY = $TRIBUTARY$
        SUZERAIN = $SUZERAIN$
        TRIBUTARY_BASE_TYPE = flag:permanent
        TYPE = flag:name_of_tributary_type
        TRIBUTE_GOLD_PERCENT = 0.1
        MONTHLY_PRESTIGE_SUZERAIN = 0.05
        MONTHLY_PRESTIGE_TRIBUTARY = -0.05
        MONTHLY_PIETY_SUZERAIN = 0
        MONTHLY_PIETY_TRIBUTARY = 0
        MONTHLY_LEVY_REINFORCEMENT_RATE_PER_SUBJECT = 0.05
        MONTHLY_LEVY_REINFORCEMENT_RATE_TRIBUTARY = -0.1
        MAN_AT_ARM_CAP_PER_TEN_SUBJECTS = 1
        CAN_DECLARE_WAR_ON_TRIB_FLAG = flag:no
        CAN_CALL_TO_WAR_SUZERAIN_FLAG = flag:yes
        CAN_CALL_TO_WAR_TRIBUTARY_FLAG = flag:yes
    }
    $TRIBUTARY$ = {
        set_variable = {
            name = possible_vasalisation_year
            value = { value = current_year add = 20}
        }
    }
}
```

It might look quite overwhelming, but it's simple once you get into the swing of it.

At first you need to name your tributary type here this name is name_of_tributary_type and adding flag: name_of_tributary_type to TYPE argument.

The SUZERAIN and TRIBUTARY fields do not interest you as they are set by make_tributary effect. The TRIBUTARY_BASE_TYPE is well a base type of tributary template it can have two values flag:permanent and flag:non_permanent those flags main usage is in succession when all tributaries type with those flag shall be inherited by Tributary Main Heir. Rest of those are monthly incomes to both tributary and suzerain, along with that:

```
set_variable = {
    name = possible_vasalisation_year
    value = { value = current_year add = 20}
}
```

For Permanent type

```
set_variable = {
```

```

        name = possible_permafication_year
        value = { value = current_year add = 15 }
    }

```

For non-Permanent type

Sets the number of years it would take for suzerain to be allow to annex \ turn non-permanent tributary into permanent one also if they are set to any number that is ≤ -1 it will make impossible for suzerain to turn/annex tributary. If you defined new Permanent Tributary type you will also need to edit `pass_tributary_type_to_heir` effect in following way:

```

pass_tributary_type_to_heir = {
    $SCOPE$ = {
        switch = {
            trigger = $TYPE$
            (...code...)
            flag:name_of_tributary_type = {
                make_tributary = {
                    TYPE = name_of_tributary_type
                    TRIBUTARY = $TRIBUTARY$
                    SUZERAIN = $NEW_RULER$
                }
            }
        }
    }
}

```

This will make sure that this tributary will be permanent. This is all you need to define new tributary type.

4. QUESTIONS & ANSWERS

Q. Can I use the framework in my mod?

A. Yes of course as long as you credit the Framework

Q. Can I edit the code of the framework?

A. Yes of course.

Q. Why only main heir gains tributaries \ suzerain?

A. I don't have any idea how to code it as it would be quite janky to do considering that there is no effect\trigger for heirs that will inherit land beside well main heir.