Openage

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Reminder

 Open source Linux clone of successful 1999 RTS Age of Empires 2

• 81 contributors, 2070 commits

C++-based

 Assignment: fix the "Archers can't attack enemy sheep" bug

Progress

Getting the game to compile: 8 hours

Getting familiar with the source: 2 days

Finding the source of the bug: 3 hours

The bug

```
bool AttackAbility::can_invoke(Unit &to_modify, const Command &cmd) {
if (cmd.has unit()) {
        Unit &target = *cmd.unit();
        bool target_is_resource = has_resource(target);
        return &to modify != &target &&
                 to modify.location &&
                 target.location &&
                 target.location->is_placed() &&
                 to modify.has attribute(attr type::attack) &&
                 has hitpoints(target) &&
                 (is_enemy(to_modify, target) || target_is_resource) &&
                 (cmd.has flag(command flag::attack res) ==
                 target is resource);
        return false;
```

The "fix"



Kvetoant commented on Feb 27

The command_flag::attack_res flag was not being added, and therefore the AttackAbility::can_invoke method was returning false. Please review my changes.

Fixes #369.

```
5 ■■■■■ libopenage/unit/command.cpp 100644 → 100755
                                                                                                                           View
    盘
              @@ -28,6 +28,11 @@ Command::Command(const Player &p, Unit *unit, coord::phys3 position)
  28
         28
  29
                     Command{p, unit, true, nullptr} {
                     this->pos = position;
         31 +
             + //allow units to attack enemy sheep
                  if(unit->unit_type->unit_class == gamedata::unit_classes::SHEEP &&
                   unit->unit_type->owner.is_enemy(p))
         34 +
                    this->add_flag(command_flag::attack_res);
  32
               Command::Command(const Player &p, UnitType *t)
         38
    盘
```

The response



TheJJ commented on Feb 27

[SFT]Technologies member

- please add yourself to copying.md
- 2. please adhere to the code and indentation style
- 3. You somehow changed the file mode from 644 to 755:)
- 4. I think we should try a more generalized approach and not only add sheep as a "special exception". I'm not sure how the command_flag::attack_res flag is set normally (I'd have do dig a bit first), but I suspect that we should place the sheep fix somewhere else, e.g. when creating the data pack if necessary)



Jon0 commented on Feb 27

[SFT]Technologies member

The <code>command_flag::attack_res</code> was made to prevent attacking being prioritised over gathering, allowing the gather action to placed on stack first and set correct graphics. Recent changes (villagers now change unit types fixing graphic issues, and global priority of abilities in <code>ability.h</code> which shows gathering is highest) might mean this flag can be removed, and the logic in <code>AttackAbility::can_invoke</code> could be refactored.

Gathering must be a higher priority, otherwise the target is killed and the villager returns to an idle state. When gather is used, it automatically stacks the attack on top, so when the target is killed, the villager begins gathering.

create nyan - yet another notation #28



① Open TheJJ opened this issue on Oct 28, 2014 · 12 comments



	TheJJ commented on Oct 28, 2014 [SFT]Technologies membe
	nyan is the future data storage format for openage.	
ı	It's designed for moddability and human-readability.	
ı	Development takes place here:	
	https://github.com/SFTtech/nyan	
	Tasks:	
	✓ format specification	
	☐ implement the nyan engine	
	add openage engine support	
	implement convert generator	

Conclusion

Bug fixed, but not in a general enough way

The code structure related to units is being reworked

Any other rework of the current data structure would be pointless