

Ryzom - Bug # 1391

Status:	Closed	Priority:	Immediate
Author:	ulukyn	Category:	Services: General
Created:	11/06/2011	Assignee:	ulukyn
Updated:	05/11/2012	Due date:	
Subject:	Bad cast of getGameCycle in persistant_data_template.h ! Break missions with PlayerReplayTimer when tick is negative		
Description	Bad cast of getGameCycle in persistant_data_template.h ! Break missions with PlayerReplayTimer when tick is negative		

History

#1 - 12/19/2011 03:11 pm - sfb

Ulukyn,

I took a look and verified that you are correct:

For the rest of the watching world here is the definition of a game cycle.

```
1 typedef uint32 TGameCycle;          // Integer game cycle count from the game (in game ticks)
```

Here we take a game cycle and return a uint32 - which is consistent. There are next a series of casts to sint32 which result in a loss of data at high values (which a long running server would encounter.)

```
1 inline uint32 saveGameCycleToSecond(NLMISC::TGameCycle tick)
2 {
3     // Evaluate the UTC of this event (with the current date of save). Suppose that 1 second==10 tick
4     return sint32(NLMISC::CTime::getSecondsSince1970()) + (sint32(tick) - sint32(CTickEventHandler::getGameCycle()))/10;
5     // NB: result should be positive since no event should have been launched before 1970!
6 }
```

It appears that loadSecondToGameCycle may suffer similar data issues as well:

```
1 inline NLMISC::TGameCycle loadSecondToGameCycle(uint32 second)
2 {
3     // Convert UTC of the event to game cycle. Suppose that 1 second==10 tick
4     sint32 newTick= CTickEventHandler::getGameCycle() + (sint32(second) - sint32(NLMISC::CTime::getSecondsSince1970()))*10;
5     // If game cycle is loaded on a server where current game cycle is too young, we can have here negative values => avoid them
6     return std::max(newTick, sint32(0));
7 }
```

I know this bug was causing a lot of problems in live - I assume you patched the cast? Can you provide us with the patch?

#2 - 01/20/2012 01:15 pm - ulukyn

- File tick.patch added

#3 - 04/11/2012 06:18 pm - ulukyn

- Status changed from New to Resolved

#4 - 04/11/2012 06:21 pm - kerval

- Target version set to Version 0.9.0

- % Done changed from 0 to 100

Apparently it has been fixed in SVN and applied with a merge :)

#5 - 05/11/2012 04:25 pm - sfb

- Category set to Services: General

- Status changed from Resolved to Closed

Files

tick.patch	1.3 kB	01/20/2012	ulukyn
------------	--------	------------	--------