

Timestamp Issue on Output Record (Output Field and TSEL)

```
record(calc, "test:calc") {  
  field(INPA, "test:calc.VAL")  
  field(CALC, "A+1")  
  field(SCAN, "1 second")  
  field(FLNK, "test:ao PP")  
}
```

```
record(ao, "test:ao")  
{  
  field(DOL, "test:calc")  
  field(OMSL, "closed_loop")  
  field(SCAN, "Passive")  
  field(TSEL, "test:calc.TIME")  
  field(OUT, "test:ai PP")  
}
```

```
record(ai, "test:ai")  
{  
  field(TSEL, "test:ao.TIME")  
  field(SCAN, "Passive")  
}
```

```
khkim@ubuntu:~/work/epics/epics-test/64bit-pv$ camonitor \  
test:calc test:ao test:ai
```

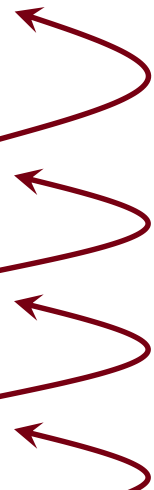
```
test:calc      2019-01-22 13:16:44.243074 63  
test:ao        2019-01-22 13:16:44.243074 63  
test:ai        2019-01-22 13:16:43.242486 63
```

```
test:calc      2019-01-22 13:16:45.243071 64  
test:ai        2019-01-22 13:16:44.243074 64  
test:ao        2019-01-22 13:16:45.243071 64
```

```
test:calc      2019-01-22 13:16:46.242934 65  
test:ai        2019-01-22 13:16:45.243071 65  
test:ao        2019-01-22 13:16:46.242934 65
```

```
test:calc      2019-01-22 13:16:47.242153 66  
test:ai        2019-01-22 13:16:46.242934 66  
test:ao        2019-01-22 13:16:47.242153 66
```

```
test:calc      2019-01-22 13:16:48.242298 67  
test:ai        2019-01-22 13:16:47.242153 67  
test:ao        2019-01-22 13:16:48.242298 67
```



Note) Downstream record (ai record) is driven by OUT filed in the ao record.
The downstream record has a cycle behind timestamp.

Timestamp Issue on Output Record (FLNK and TSEL)

```
record(calc, "test:calc") {
  field(INPA, "test:calc.VAL")
  field(CALC, "A+1")
  field(SCAN, "1 second")
  field(FLNK, "test:ao PP")
}

record(ao, "test:ao")
{
  field(DOL, "test:calc")
  field(OMSL, "closed_loop")
  field(SCAN, "Passive")
  field(TSEL, "test:calc.TIME")
  field(FLNK, "test:ai PP")
}

record(ai, "test:ai")
{
  field(INP, "test:ao")
  field(TSEL, "test:ao.TIME")
  field(SCAN, "Passive")
}
```

```
khkim@ubuntu:~/work/epics/epics-test/64bit-pv$ camonitor \
test:calc test:ao test:ai
test:calc      2019-01-22 13:30:47.303750 75
test:ao        2019-01-22 13:30:47.303750 75
test:ai        2019-01-22 13:30:47.303750 75

test:calc      2019-01-22 13:30:48.304106 76
test:ao        2019-01-22 13:30:48.304106 76
test:ai        2019-01-22 13:30:48.304106 76

test:calc      2019-01-22 13:30:49.304552 77
test:ao        2019-01-22 13:30:49.304552 77
test:ai        2019-01-22 13:30:49.304552 77

test:calc      2019-01-22 13:30:50.304297 78
test:ao        2019-01-22 13:30:50.304297 78
test:ai        2019-01-22 13:30:50.304297 78

test:calc      2019-01-22 13:30:51.304120 79
test:ao        2019-01-22 13:30:51.304120 79
test:ai        2019-01-22 13:30:51.304120 79
```

If we use FLNK to process downstream record, there is no issue on the timestamp.