

Enduro/X Core - Feature #739

Singleton process groups and delayed queue support

12/08/2021 10:37 PM - Madars

Status:	Closed	Start date:	12/08/2021
Priority:	Normal (Code 4)	Due date:	
Assignee:		% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:			
Description			

History

#1 - 12/08/2021 10:50 PM - Madars

It would nice to have:

Singleton process groups:

- Special grouping in ndrconfig.xml shall be made, so that ndrxd would boot only those server for which the singleton group XATMI (special server) have got the DLM lock. The other instances living in the same singleton group would wait for the lock and would not boot the ndrxd/cpmsrv processes (just bypass their booting).
- If lock is lost by singleton group server, the processes in the singleton group shall killed immediately.
- The singleton group providers could write timestamps in shared memory. Any critical binaries such as tmsrv or tmqueue could at certain decision points check the status of timestamp updates. If not updated for too long, the process should just restart it self, As there might be a chance that server was suspended and other node already have taken over, while first node have not yet had a time to kill the singleton group processes (as lock is was lost).

#2 - 11/26/2023 08:46 PM - Madars

- Subject changed from Distributed lock support, and singleton process groups to Singleton process groups

#3 - 11/26/2023 08:52 PM - Madars

Release notes

- Implemented process groups, for which there is option to configure group as singleton. See "<procgrps>" tag in **ndrconfig.xml(5)**.
- Implemented fcntl() based lock provider. See manage of **exsinglesv(5)**, **tmqueue(8)** and **tmsrv(8)** processes has been updated to support the singleton work mode.
- Added support for **tpenqueue(3)** flags TPQTIME_ABS and TPQTIME_REL.

Process groups are optional (new feature), which by default are not used. For more information, read:

https://www.endurox.org/dokuwiki/doku.php?id=endurox:v8.0.x:guides:ex_adminman#_singleton_process_groups

Before upgrading from previous version, please ensure that all running instances on the server are terminated and additionally following command must be executed before package upgrade (i.e. on old version):

```
$ xadmin down -y
```

As in new version LCF SHM sizes are changed, **down** command ensures that LCF shared memory is removed.

New version's ABI is backwards compatible with previous Enduro/X 8.0.x versions.

Available from Enduro/X release 8.0.10+.

#4 - 11/26/2023 09:47 PM - Madars

- *Status changed from New to Resolved*

- *% Done changed from 0 to 100*

#5 - 11/26/2023 09:55 PM - Madars

- *Status changed from Resolved to Closed*

#6 - 11/27/2023 12:46 PM - Madars

- *Subject changed from Singleton process groups to Singleton process groups and delayed queue support*