From 11.7 to 12.2 to 12.8 What's New and Exciting for the DBA ?

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Disclaimer

YMMV: Your Mileage May Vary

- You may not **_need_** to use **_all_** of these parameters

- Don't mess around in production !!

- This is not an exhaustive list
  - **I counted over 100 DBA-specific enhancements from 11.7 -> 12.8**

- If you are not sure then ASK !!!

OpenEdge Life Cycle

Product Release	Latest Product Update (U)	Life Cycle by Product Release		
		Active	Sunset	Retired
OpenEdge 12.8 (LTS)	12.8.1	2024-Jan	2028-Jan-01	2030-Jan-01
OpenEdge 12.2 (LTS)	12.2.14	2020-Apr	2025-Oct-01	2028-Oct-01
OpenEdge 11.7 (LTS)	11.7.19	2017-Mar	2019-Apr-01	2025-Apr-01

2017-Mar

2025-Apr-01

OpenEdge 11.7

Features

- Change Data Capture
  - **Used to replicate specific data**
  - **NOT for HA/DR like OpenEdge Replication**

- Diagnostic Data Collection
  - **-diagDir –diagEvent –diagEvtLevel –diagFormat –diagFS -diagPause -diagPrefix**
  - **Event driven: Lock table overflow, BI growth, system errors…**
  - **Save critical data to disk when an event occurs**

OpenEdge 11.7

Features

- Automated Log File Truncation
  - **-lgTruncateFrequency -lgTruncateTime -lgTruncateSize -lgArchiveEnable -lgArchiveDir**
  - **Replaces prolog**

- OpenSSL 1.1.1 (11.7.5)
  - **Not necessarily a DBA feature, but important**

OpenEdge 11.7

Startup Parameters

- -omitLgMsgs
  - **Omits list of msg# from db.lg**
  - **Examples: login/logout messages**
- –limitLgPayload
  - **Omit private information from db.lg**
  - **user name, device, tty name, IP address, and connection hostname**
- -hashLatchFactor
  - **Number of BHT latches to create as a % of BHT size (default 10%)**
- -usernotifytime

Openedge 12.0

Features and parameters

- AI File Streaming for OpenEdge Replication
- Multi-threaded 4GL server
  - **CAREFUL: Adjust –Mi –Ma –Mpb accordingly**
- Server-side joins
- VST data for LOBs
  - **_lobStat and _UserLobStat**
  - **-baselob –baseuserlob –lobrangesize**

OpenEdge 12.1

Features

- dsrutil verify
  - **Check syntax of repl.properties files**
- Extend and mark variable-length extents as fixed
  - **WSS best practice: we no longer use fixed length extents except in certain extreme circumstances**
- SSJ Improvements: dynamic queries

OpenEdge 12.1

Parameters

- More parameters supported by -increaseto

```
proutil db-name -C increaseto  [ -B n ][ -B2 n ] [ -L n ] [ -Mn n ]
                [ -Mxs n ] [ -aibufs n ] [ -bibufs n ]  [ -cdcsize n ] [ -ecsize n ]
                [ -n n ] [ -omsize n ] [ -pica n ] [ -mtpmsize n ]  [ -secsize n ]
                [ -indexrangesize n ] [ -lobrangesize n ] [ -tablerangesize n ]
                [ -userindexrangesize n ] [ -userlobrangesize n ] [ -usertablerangesize n ]
```

OpenEdge 12.2

Features

- Added a "-help" on most utilities
  - **Try it !!**

- Automatic database reconnection
  - **Connect to a secondary DB if first becomes unavailable**
  - **-dbalt1,-dbalt2, -retryConnect, -retryConnectPause**
  - **-autoReconnect on the non-batch client AVMs**
- OpenSSL 1.1.1d

OpenEdge 12.2

Parameters

- -SQLWidthUpdate –SQLTruncateTooLarge
  - **Careful to set –SQLTruncateTooLarge to "OUTPUT", not "ON"**
- -dbnotifytime (vs –usernotifytime from 11.7)
- More online parameter changes
  - **-aiarcdir, -dbnotifyops,-dbnotifytime, -indexrangesize, -lobrangesize, -Ma, -Mm, -Mn, -n, -semsets, -ssj, -tablerangesize, -userindexrangesize, -userlobrangesize, and –usertablerangesize**

OpenEdge 12.3

Features and parameters

- autoReconnect to replication targets
- Port scanner support for OE Replication
- proutil –C conv1112 without replication rebase
- proutil –C tablereorg
- proutil –C lobanalys
- -biscantime
- Online change to secondary login broker parameters
  - **-Mi –Ma –Mm –Mpb –minport –maxport -PendConnTime**

OpenEdge 12.4

Features and Parameters

- proutil –C dbrestrict
  - **Dbadmin, datamove, partitioncopy, rollforward**
- Online table truncation
- probim (BI Manager)
- proshut -replSync
- OpenEdge Command Center 1.0

OpenEdge 12.5

Features and Parameters

- Truncate BI on replication target

- Truncate/move LOBs

- New datetime-tz VST

  - **No longer need to parse CHAR fields**

- idxcompact verbose

- Faster idxfix

- OECC 1.1

OpenEdge 12.5

Backup Enhancements

- Actual compression !!
  - **-com -comlevel [1-4]**
  - **Default with –com and no –comlevel is ZSTD algorithm**
  - **Other values trade off speed and compression**

OpenEdge 12.6

Features

- Idxcompact enhancement
  - **Clean unused blocks**
- Large file support (2 Gb) for Workgroup DB
- Online area truncate
- Run dbanalys/idxanalys/etc concurrently
- Idxfix perf and delete enhancements

OpenEdge 12.6

Features

- OpenEdge Command Center 1.2
- Binary dump enhancements for corrupt records
- TLS 1.3 default

OpenEdge 12.7

Features

- New "archive files" (.apl)
  - ○ **Signed PL based on java JAR standard**
- prostrct removeonline
- proutil –C tablereorg optimizations
  - ○ **Restrict and smartscan options**
- Multi-threaded idxcheck
- rfutil aiarchiver enable online
  - ○ **No longer need to probkup online**

OpenEdge 12.7

New Restore Features in prorest

- -describe
- –thread [0|1] –threadnum #threads
- -rbf and –wbf: read and write buffers

OpenEdge 12.8

Features

- OpenTelemetry API
  - **For AVM and PASOE clients**

- proutil –C probe <state>
  - **State = startup, liveness, readiness**
  - **-verbose provides a textual message about state**

- VST for AIMGT
  - **_logging VST: _logging-AISwitchSchedule and _logging-AIArchDir**

OpenEdge 12.8

Features
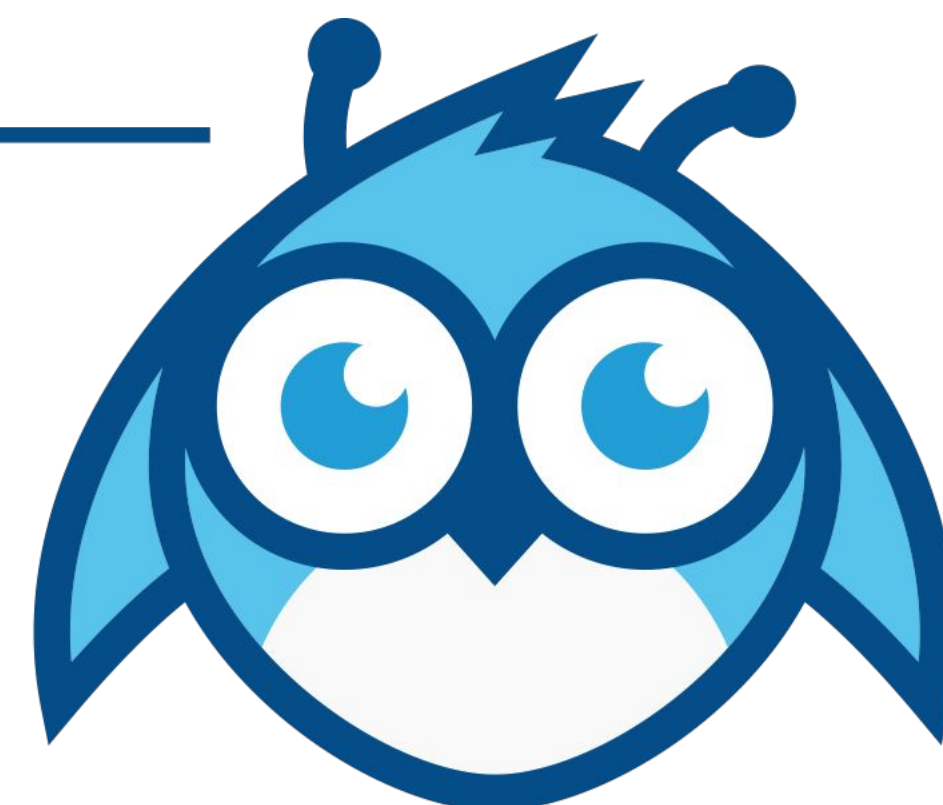
- proutil –C tablereorg using non-unique index
- Create PF of actual params
  - **From promon: primary and secondary brokers**
  - **From _dbparams VST: only primary broker**
    - find _dbparams no-lock where _dbparams-name = "-pf".
- _UserIndexStat-OSRead, _UserTableStat-OSRead, and _UserLobStat-OSRead

OpenEdge 12.8

Features

- Multi-threaded probkup
  - **–thread [0|1] –threadnum #threads**
  - **-wbf: number of write buffers**
- _DbStatus._DbStatus-OEVersion
  - **Version string in same format as PROVERSION**
- Dynamic Data Masking
  - **Masks sensitive data when displaying at runtime**
- OpenSSL 3.1.1

Any Questions?

Thank you!