OpenEdge Roadmap

Rob Straight
Director, OpenEdge Product Management
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Disclaimer

All roadmaps are for informational purposes only, and the reader is hereby cautioned that actual product development may vary significantly from roadmaps.

These roadmaps may not be interpreted as any commitment on behalf of Progress, and future development, timing and release of any features or functionality described in the roadmaps remains at our sole discretion.
Ch-ch-ch-ch-ch-changes

I
Welcome Change
As Long as Nothing is Altered or Different

APIs Everywhere

Cloud and Mobile

Component Assembly

Continuous Deployment

Continuous Availability

Application Evolution
YOUR FUTURE

Availability
Performance
Evolution
Availability

99.999
OpenEdge 12.0 – Availability

- Improved Resilience:
  - Self-monitor PAS for OpenEdge health – auto-cycle Server instances
  - Replication AI file streaming

**Diagram**

- **OLTP**
- **Source**
- **Target**
- **Replication Server**
- **Replication Agent**
- **Agent Writer Thread**

**Legend**

- **Pica**: Plugin Communication Area
- **RSB**: Replication Streamed Block
Replication Latency by Time

Source Machine

Repl Server behind the Source DB by

Target Machine

Time delay to process the last block on Target
OpenEdge 12.0 – Availability

- Improved Resilience:
  - Self-monitor PAS for OpenEdge health – auto-cycle Server instances
  - Replication AI file streaming

- Additional Online Operations:
  - SQL Drop Index, Column or Trigger
  - SQL Rename Index or Column
  - SQL – JVM management and configuration
  - Convert variable-length Extents to a fixed length
  - Database log file archive and truncate (OE 11.7.3)
OpenEdge 12.0 – Security for Availability

- Update Spring (OE11.7.x & 12.0) and OpenSSL (OE12.0)
- PAS for OE support for OAuth2 (OE11.7.3) & SAML (OE11.7.4)
- SQL/ABL Security Model Unification, Phase 1
- Internal infrastructure security:
  - Address Veracode (Java), AppScan (C++) and OWASP (3rd-party libraries) high-priority issues
  - Update Client Principal cryptography
  - Remove RC4 as a Transparent Data Encryption cipher
  - Support current Hash Message Authentication Code (HMAC) algorithms (OE11.7.4)
OpenEdge 12 Futures

Continuous Availability

- Online Database Maintenance
  - Index rebuild
  - Startup parameters: default settings, increasing online, auto-tuning (autonomics)
  - BI space reclamation, Extent management, Area truncate/remove

- Online Schema Changes
  - Add/Drop resources – Field, Table, Index, Sequence, Trigger, etc.

- Automated Upgrades
  - Continuous Integration & Deployment (CI/CD)

- Disaster Recovery
  - Automated & transparent ABL Client failover

- Security
  - Updating Spring, OpenSSL and internal cryptography
  - SQL/ABL security model unification- adopt SQL standard
  - Signing R-code and PL files

Always On!
Performance & Scale
OpenEdge 12.0 – Performance and Scale

Language: Resolve Table JOINs on the Server

Today

Server

Client

OpenEdge 12.0

Students Table
Student | ID*
---|---
John Smith | 084
Jane Briggs | 100
John Smith | 182
Mark Antony | 219

Activities Table
ID* | Activity1 | Cost1 | Activity2 | Cost2
---|---|---|---|---
084 | Tennis | $36 | Swimming | $17
100 | Squash | $40 | Swimming | $17
182 | Tennis | $36 | Swimming | $17
219 | Swimming | $15 | Golf | $47
OpenEdge 12.0 – Performance and Scale

OpenEdge Database: **Multi-threaded Processing**

Today, DB access requests are handled one-at-a-time.

Tomorrow, DB access requests are handled **Concurrently** for Remote Clients.
Up to 3x throughput versus 11.7 in N-tiered deployments

Your results may vary depending on architecture and use-case

Transaction Time Comparison
(mILLISECONDS, lower is better)
OpenEdge 12.0 – Performance and Scale

- ABL & OpenEdge Database
  - Streamline Server-side Table JOINs
  - Multi-threaded database
  - Reduce contention on the buffer hash table

- SQL
  - Autonomously update statistics
  - Ability to cancel a (long running) SQL query
OpenEdge 12 Futures

Performance and Scale

- Performance
  - Increased ABL/OOABL run time performance
  - SQL bulk load of data
  - Ongoing DataServer performance improvements

- Scale
  - Enhanced support for Containers, Kubernetes (orchestration)
Application Evolution / Modernization
Evolution: OpenEdge 11 to 12

**OpenEdge 11.0**
- Database Multi-tenancy
- Business Process Management
- JSON Parser support
- OOABL Language enhancements
- Identity and Encryption updates

**OpenEdge 11.1**
- Multi-tenancy Governors
- Tenant Management with OEM
- Encrypted Password support
- Pluggable Authentication callbacks
- ODBC/JDBC upgrades

**OpenEdge 11.2**
- RESTful Web Services support
- SSO Support
- SQL Paging Support
- JavaScript Data Objects (JSDO)

**OpenEdge 11.3.x**
- Advanced REST Administrator
- Tenant Data Recovery
- Multi-tenancy Index Rebuilds
- Online Backup Performance
- ABL Datatype support in OE-BPM
- SOAP 1.2 support

**OpenEdge 11.4.x**
- DB Table Partitioning
- SAML support with REST
- ABLUnit Testing framework
- Corticon support with OE BPM

**OpenEdge 11.5.x**
- PAS for OpenEdge (new AppServer)
- Advanced Enterprise DB
- Advanced Partition Management
- JSDO Local Storage support

**OpenEdge 11.6.x**
- Custom Installation bundle utility
- Binary and JSON object serializer
- ABL Enums, Reflection enhanced
- Partition Copy utility
- WebSpeed support in PAS OE
- SQL Performance optimizations

**OpenEdge 11.7.x**
- Change Data Capture
- OpenEdge Authentication Gateway
- Database Client Notifications
- DB Monitoring Enhancements
- DataServer Performance Increase
- Replication Sets
- OAuth Support

**OpenEdge 12.0**
- The Next Generation is Coming...

Legend:
- Security
- Scale
- Availability

10.2B Dec 2009
11.0 Dec 2011
11.1 Jul 2012
11.2 Feb 2013
11.3 Aug 2013
11.4 Aug 2014
11.5 Dec 2014
11.6 Oct 2015
11.6.1
11.6.2
11.6.3
11.6.4
11.7.1
11.7.2
11.7.3
12.0 Q1 2019
OpenEdge 12.0 – Evolution Tooling

- Coding:
  - SQL: Null as a value, and Date-Time Function support
  - Execute FINALLY blocks during STOP processing (11.7.3)
  - Set a return code on application exit (11.7.4)
  - Technical Preview: Eclipse Che hosted development

- Refactoring:
  - Find references
  - Rename a Class Name – filename, constructors, class name, .p creating new objects, variable declaration, arguments/parameters, using, inherits, NEW statements

- Compilation:
  - Supply Progress Compilation Tools (PCT) (11.7.3)
  - Prevent Methods/Function with no RETURN, or RETURN from inside a FINALLY block

- Code Quality:
  - ABL source code analysis, via SonarCube
OpenEdge 12

Evolution Tooling

- Coding:
  - CI/CD and Eclipse Che hosted development
  - Call Tree/Graph
  - REST service documentation (OpenAPI)

- Refactoring:
  - Rename Parameters, Properties
  - Harvest business logic & procedural to OO conversion

- Compilation:
  - Additional quality and best practices checks

- Code Quality:
  - Generate Stack Trace with Error Objects
YOUR FUTURE
Availability
Performance
Evolution
OPENEDGE 12...

The New Dawn is Coming!
OpenEdge Calendar

Q1 FY19
12.0
Performance and Continuous Availability

Q2* FY19
11.7.5
Bug Fixes & TBD/limited Features

Q3* FY19
12.1
Additional Continuous Availability Features

Q4* FY19
12.2
99.999 Availability & Language Performance

Q1* FY20
11.7.6
Bug Fixes & TBD/limited Features

Q2* FY20
12.2.1
Bug Fixes

* Proposed Dates
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