

OPENEDGE RDBMS / ADVANCED ENTERPRISE EDITION

The Database Challenge: Meeting Business Needs

Highlights

- Total data management with the industry's lowest cost of ownership
- High performance and availability, with ultimate reliability
- Extensive scalability with virtually unlimited data storage capabilities
- Mission-critical production systems that scale linearly with SaaS/Cloud user demands
- Easy maintenance, even for the most complex virtualized infrastructure

Features

- Multi-tenant embeddable relational database
- Browser-based monitoring and management tools
- Near real-time secure disaster recovery
- Transaction and application auditing
- Table Partitioning
- At-rest Data Encryption

Overview

Rapid changes in today's business environment mean your tools need to both keep pace and be powerful enough to manage your intensive database needs. Progress delivers an innovative Software as a Service (SaaS) cloud computing and application production solution in one package—without breaking your budget or sacrificing security. Get scalable database performance, reliability and 24/7 availability with our relational database solution, Progress® OpenEdge® Advanced Enterprise Edition. Our comprehensive multiprocessing environment supports thousands of concurrent users and terabytes of data. If your system can't do that, it's time for a change.

What it Does

Progress OpenEdge Relational Database Management System (RDBMS), Advanced Enterprise Edition, easily and cost-effectively grows as your business grows. It provides proactive monitoring of all critical information assets and real-time information replication to secondary servers without coding, and with operational responsiveness to business conditions. It delivers:

- Perfect linear scalability with real-world applications and over 20,000 concurrent database users, with flat sub-second response times
- Throughput of over 600,000 transactions per minute and the ability to handle virtually any transaction workload
- Optimized performance with terabytes of data cached into memory
- Unlimited data storage in a single database, accessible via a browser-based dashboard

Five-in-One Solution

OpenEdge Advanced Enterprise Edition (AEE) delivers five solutions in one. With it you get:

- 1.** Transparent Data Encryption (TDE)
- 2.** Data Availability and Management with Table Partitioning
- 3.** Multi-Tenancy for SaaS/Cloud Deployments
- 4.** Data Replication for Secure Recovery
- 5.** High-Performance Data Visibility

Transparent Data Encryption (TDE)

TDE is a complete solution out of the box, using standard encryption libraries and encryption key management to provide secure, encrypted data. It requires no changes to your application, user procedures, administration or management processes. Data encryption provides protection on disk, in backups and binary dump files, and supports several encryption ciphers (AES, DES, DES-3 and RC4), so you can balance your security vs. performance needs. In fact, applications typically execute at full speed with less than 2% degradation while encrypting/decrypting. With many government regulations requiring companies to protect, track and store data, our RDBMS helps you stay fully compliant. This includes:

- Payment Card Industry-Data Security Standard (PCI-DSS)
- Sarbanes-Oxley (SOX)
- Health Insurance Portability and Accountability Act (HIPAA)
- European Union Directive on Data Protection (EU-DPD)

While these regulations are critical to retail, financial services and healthcare verticals, all companies can benefit from protecting their data. Data encryption is comprehensive in AEE: protect as much as you want, or down to a single table, index or field. It includes both policy tools and a secure encryption key store kept apart from the database. Leveraging the authentication, authorization and auditing functionality inherent in Progress OpenEdge and the additional Advanced Business Language (ABL) security features, TDE provides seamless protection of your data.

Table Partitioning

Table Partitioning can greatly enhance the availability, manageability and performance of almost any enterprise database. By partitioning tables into smaller, more manageable units, database administrators use a “divide and conquer” approach to data management. Maintenance operations become focused on particular portions of tables that can be managed collectively or individually. This limits the universe of data to be manipulated, and gives administrators considerable flexibility in partition management. Queries can be pruned to isolate index usage for a particular partition, and the index for that partition. Queries perform more efficiently because the partition has its own index, potentially spreading index contention across multiple indices, rather than having a single index bottleneck. Even better, OpenEdge AEE Table Partitioning is transparent to the application and requires minimal changes to your application.

Multi-Tenancy

A multi-tenant database provides database support to a number of separate and distinct groups of users, especially helpful when deploying SaaS applications in the Cloud. Tenant support is implemented in a number of ways, including the database layer, built-in support for multiple tenants within a single database and tenant-aware database utilities and tools.

The data administration console also makes it easier to manage tenants. It includes the ability to:

- Rename tenants, tenant groups and/or tenant domains
- Dump and load tenant data
- Filter and batch large datasets via an improved user interface

Tenant partition management also features drag and drop support, making management much easier.

Secure Data Replication

Avoid the lost revenue, tarnished reputation and customer dissatisfaction that accompany database outages or unplanned downtime by utilizing OpenEdge AEE Replication to perform near real-time data duplication for disaster recovery. AEE Replication, when combined with OpenEdge clusters and redundant hardware, works to eliminate as many points of failure as possible. In fact, OpenEdge clusters are deeply integrated with the failover software specific to the underlying operating system and offer protection from a single point of failure at the server instance level. It further provides two servers connected to your production database capable of accessing your data when necessary, all of which is completely transparent to applications running on the platform.

High Data Visibility

With OpenEdge AEE Management, the IT team can proactively monitor and keep your application running smoothly from anywhere, monitoring database use in real-time and proactively troubleshooting impending problems. This can happen despite peak processing

demands, power users and a dependence on remote systems that provide essential data into the central complex. Taken together, it ensures customer satisfaction and meets SLAs.

Much of the OpenEdge Management asset monitoring can be automated at the task level by customizing templates and configuring alerts and notifications to monitor performance thresholds. There is also a reporting and job scheduling facility built into the software to create best practice jobs and reports to maintain your OpenEdge environment.

Key Benefits

Easy Installation with Total Compatibility: Build what you need because OpenEdge AEE will grow and extend as your business evolves.

Manage Compliance Requirements: Policy-based auditing services are written into the application, minimizing the performance impact while role-based credentials safeguard data integrity. Meet compliance requirements while getting the best possible performance.

High Availability: Your applications are available 24/7 and protected via data replication on one or more remote, stand-by locations. Full integrity between the source and remote databases is guaranteed.

Real-Time Business Reporting: Offload reporting and ETL clients to a read-only copy of the database, providing a high-performance analytics data store, eliminating performance issues associated with reporting directly from your production transaction database environment.

Lower Total Cost of Ownership: Get highly efficient data management, deployment flexibility and great scalability, all with reduced IT resources. Your database runs reliably while DBAs manage and change it online—decreasing productivity loss and customer dissatisfaction from downtime and outages.

Summary Comparison: Workgroup, Enterprise and Advanced Enterprise

The following table shows the primary features and recommended limits of the different editions of the OpenEdge RDBMS. The host operating system and available hardware may impose lower limits:

FEATURE	ADVANCED ENTERPRISE	ENTERPRISE	WORKGROUP
Transparent Data Encryption (TDE)	✓	Add-on Purchase	X
JTA coordinated X/Open distributed transactions	✓	✓	X
ABL coordinated distributed transactions	✓	✓	✓
Audit Event Logging	✓	✓	X
Enhanced multiprocessor support configuration parameters	✓	✓	X
Management Console for reporting and alerts	✓	Add-on Purchase	Add-on Purchase
Asynchronous I/O processes	✓	✓	X
Asynchronous checkpoints	✓	✓	X
Secondary buffer pool	✓	✓	X
Quiet point for split-mirror or snapshot backups	✓	✓	X
Cluster support for automatic failover	✓	✓	X
Horizontal Table Partitioning	✓	Add-on Purchase	X
NFS mounted data storage volumes	✓	✓	X
Type II Data Areas	✓	✓	✓
Large files for data storage	✓	✓	X
Large files for backup and data dumps	✓	✓	✓
Multi-tenant tables	✓	Add-on Purchase	X
Selectable data block size	✓	✓	X
Replication to a Slave copy	✓	Add-on Purchase	Add-on Purchase
Read-only access of a Slave copy	✓	Add-on Purchase	Add-on Purchase

About Progress OpenEdge

Progress® OpenEdge® is the leading platform for simplifying and streamlining the development, integration and management of global business applications for fast time-to-market. With Progress OpenEdge, you can develop dynamic solutions that incorporate business process and integration capabilities securely across multiple platforms and devices. Whether you deploy on-premise, on a mobile device, or in the Cloud, Progress OpenEdge applications offer a single integrated platform that is 40% more productive and provides a 30% cost savings versus the competition. Over 47,000 businesses in more than 175 countries run on the Progress OpenEdge platform.

For more information, please visit

www.progress.com/openedge.

About Progress

Progress (NASDAQ: PRGS) is a global software company that simplifies the development, deployment and management of business applications on-premise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership. Progress can be reached at www.progress.com or 1-781-280-4000.

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