


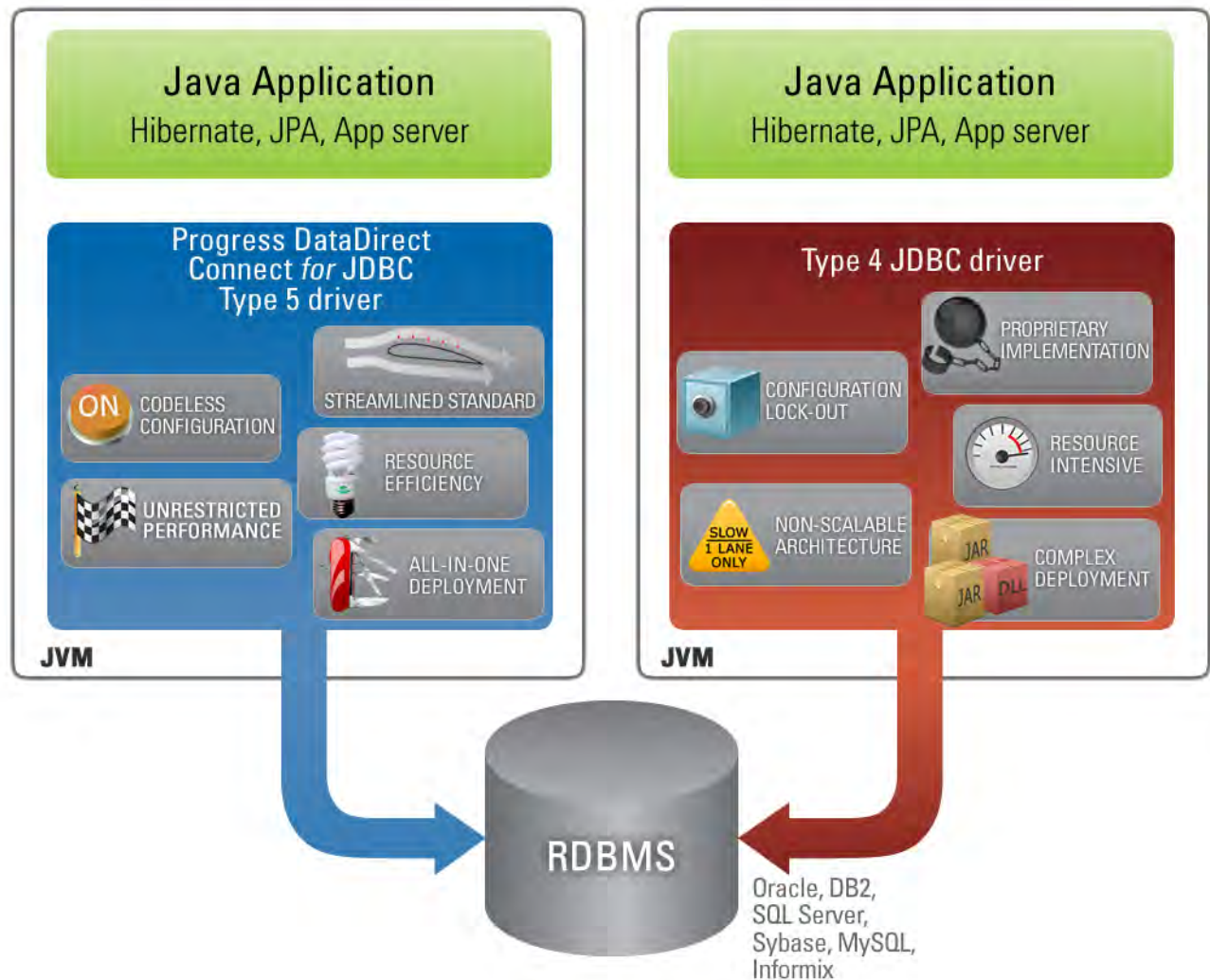


TYPE 5 JDBC DRIVERS VS. TYPE 4 AT A GLANCE

Type 5 JDBC Driver Features	Type 4 JDBC Driver Problems
 <p>Unrestricted Performance Driver response time and data throughput are consistent regardless of the runtime environment or data access model and stay consistent even as more application users are added.</p>	 <p>Non-Scalable Architecture Overall driver response time or data throughput performance is poor when deployed into different JVMs, within ORM frameworks or app servers, or as the number of application users increases.</p>
 <p>Codeless Configuration Features and functionality can be added, configured, or tuned for any application without changing application code, regardless of environment or data access model.</p>	 <p>Unavailable, Inaccessible Functionality New database or driver functionality is not available across all supported JVMs or hardware or within ORM frameworks or app servers because these technologies do not allow developers access to the JDBC code to enable features and functionality.</p>
 <p>Resource Efficiency Driver use of application runtime CPU and memory resources is minimized and can be tuned in the driver as need to fit specific runtime environment parameters or limits. Application data throughput stays high even when deployed into a virtualized environment.</p>	 <p>Resource Intensive Application resource usage targets cannot be achieved because the driver uses excessive CPU cycles and consumes vast memory resources during data access. Data throughput in virtualized environments is particularly poor. Tuning options, if available are inaccessible or limited.</p>
 <p>All-In-One Deployment A single driver JAR file is required regardless of the Java environment or application requirements. Advanced functionality does not require the use of an external DLL or shared library.</p>	 <p>Complex Deployment Multiple JAR files are required to support deployment across different JVMs or hardware and to access all supported versions of a particular database. Bulk data loading, security, high availability, and XA features are examples of functionality that require the use of an external DLL or shared library.</p>
 <p>Streamlined Standard No proprietary extensions to the JDBC specification are required by the driver for any supported data source.</p>	 <p>Proprietary Implementation Each driver requires the use of proprietary code to support features such as BLOBs and CLOBs, high availability, and XA. With each data source that an application must support, the amount of data source-specific code that must be maintained increases.</p>

TYPE 5 JDBC DRIVERS VS. TYPE 4 AT A GLANCE



Type 5 JDBC drivers offer the same client-side, single-tier, 100% Java architecture of Type 4 JDBC drivers, but address the limitations of many of the Type 4 JDBC drivers available today.

Progress DataDirect is the first and only vendor of Type 5 JDBC drivers to Oracle, MS SQL Server, DB2, Sybase, MySQL, and Informix.