

Whitepaper

Safeguard the Lifeblood of Your Applications with Data Connectivity

Magnitude offers innovative connectivity solutions with as little or as much assistance as customers want, from reliable, standards-based drivers, to custom connectors, to a complete connectivity platform and end-to-end managed services for customization, development, testing, certification and maintenance.

The value of a data-driven application depends largely on the quality of its access to data. That reality makes the connectors between applications and data sources critically important, and the possible range of requirements broad. Many organizations have specific needs related to unique features or data sources, as well as specialized performance or certification requirements. Establishing and maintaining connectivity to evolving data sources has become a primary challenge for both enterprise data centers and independent software vendors.

Not all data connectors are created equal, and commodity drivers often fall short in terms of performance, security and stability.

What's more, few development organizations have the expertise or inclination to optimize and maintain those drivers, which can compromise development timelines, budgets and overall product quality.

Beyond providing high-quality data connectivity solutions, Magnitude also has your back, safeguarding data connectivity with the priority it deserves. Each customer engagement is tailored to provide whatever's necessary, from state-of-the-art data connectors and support to full integration with your development lifecycles.

Magnitude offers a full spectrum of services that abstract away the complexity of developing, customizing, testing and maintaining data connectors. The result is more efficient development and, improved product quality and customer experience.

A Trusted Partner to Help Meet Critical Data Connectivity Challenges

Challenge

Meet the full range of data connectivity requirements with cost-effective, high-quality solutions that evolve over time as needed.

Solution

Engage with the Magnitude team for industry-leading data connectors, complemented where needed by Magnitude Services.

Benefits

Data-centric applications have high-performance, dependable access to the data they rely on, maintained and supported by Magnitude according to individual needs.

Integration & Testing Services

Streamline connectivity to evolving data sources

Magnitude Simba Integration & Testing Services lower the burden on your internal resources while enhancing product quality. They accelerate and streamline the process of accommodating new and changing data sources on any OS, providing all infrastructure needed including specialized authentication testing on frameworks such as Kerberos, LDAP and PAM.

Development teams often find it challenging to establish, optimize, test and maintain data connectivity within their software. Often this is because they lack the necessary resources (people or infrastructure) and expertise, particularly to fulfill ongoing requirements, such as with successive revisions of an application or database. Simba Integration & Testing Services eliminate data connectivity complexity for you and help automate testing.

Engineering Services

Even for seasoned programmers, the finer points of how code interacts with a third-party driver can lead to obscure challenges. With 35 years of data connectivity experience, the Magnitude team can anticipate most issues you will encounter. Engineering Services place Magnitude data connectivity experts directly into customer development environments for quality and release cycles, integrating and optimizing application connectivity to specific data sources.

Test Automation

Script-based test-automation services include web-based or full-client user interfaces on a variety of OSs including Windows, Mac and Linux. Services enhance existing automated test suites and/or newly developed custom tests. Automation facilitates repeatable testing for more consistent and accurate results, including with each round of changes in DevOps and continuous integration environments.

Certification Services

Magnitude takes the headaches out of attesting to an application's interoperability or suitability for specific usages. Working directly with your development and audit teams, for example, Magnitude can certify compatibility between a given application and specific versions of data sources, regulatory frameworks or visualization tools such as Microsoft Excel, PowerBI and Tableau. Our engineers can work with you to help resolve any identified issues.

Test Infrastructure

Building the infrastructure to test applications against dozens of data sources is burdensome. Simba operates a full range of sources for end-to-end product testing, from enterprise databases to frameworks such as Hadoop, MongoDB and Cassandra. That infrastructure, whether in on-premises data centers or public cloud instances like Concur and Salesforce, relieves you of the cost and responsibility to obtain the resources and expertise yourself.

“ **For organizations accustomed to developing custom data connectors, adopting Magnitude Simba SDK redirects resources from just keeping the lights on to the value-added tasks that create strategic advantages.** ”

Data Connector Customization Services

Meet Specialized Needs without In-house Resources

Inevitably, some implementations cannot be handled using commercially available drivers. Applications may need to connect with specialized data sources, or they may need to meet unique requirements. And they may need to support that connectivity using a certified, commercially supported driver. Many organizations lack the specific expertise to meet these development goals, and for many more, it is also an unwelcome drain on internal development resources that can jeopardize project costs and timelines.

To reduce the burden, Magnitude offers a full spectrum of Simba Data Connector Customization Services that make it significantly easier and more cost-effective to meet complex needs and edge cases, while enabling your development team to retain their focus on adding value to the core functionality of your software.

Specialized Expertise

Most in-house development teams simply don't have deep expertise modifying and maintaining data connectors, and our Data Connector Customization Services fill that gap. Rather than occupying members of internal development teams with wasteful requirements to get up to speed on the skillsets needed to customize drivers, Magnitude experts make it significantly easier and more cost-effective to meet those needs over the long term.

Unique Requirements

Magnitude experts meet unique requirements for data connectors every day such as added functionality, enhanced security and regulatory compliance, beyond the base functionality of off-the-shelf or open-source drivers. Customizations can include support for less-prevalent operating systems, identity and access management logic, custom data types and optimized usage of underlying query languages and engines.

License & Branding Flexibility

Our Data Connector Customization Services give product teams flexible capabilities to modify data connectors from Magnitude or from the public domain. Transparent redistribution is only available for Magnitude developed connectors. If it's open source, it depends on what the specific license is. For example, Magnitude could add identity and access management (IAM) functionality to an open-source driver that supports proprietary additions that a software vendor has built into its own version of an open-source application or data source.

“ **Simba SDK improves developers' productivity dramatically for lower TCO and faster time to completion, while also simplifying development and reducing risk.** ”

Simba SDK Licensed Development & Testing Services

Outsource or Augment Teams and Leverage Simba SDK

Organizations that choose to build or modify drivers in-house can simplify the process and improve results using the Simba SDK, which encapsulates decades of leadership experience building data connectors. In fact, it is the same set of components and tools that Magnitude engineers use internally every day to build commercial - and custom - data connectors.

To get the greatest possible value from the Simba SDK, you can outsource development and maintenance entirely or augment your teams with Magnitude expertise, drawing on our comprehensive, engineering-led set of SDK Licensed Development & Testing Services. This approach eliminates the time you would otherwise need to get up to speed on the Simba SDK, while also enhancing product quality and streamlining long-term maintenance.

Expert Driver Development

Magnitude experts bring deep experience building data connectors, including C/C++ development for ODBC and Java for JDBC, using the toolchains an organization prefers, such as Visual Studio, GNU Compilers and Xcode. Likewise, data connectors based on

the Simba SDK provide early and complete support for new standards automatically. And Magnitude engineers participate in your existing workflows, including established development lifecycles and quality-assurance processes.

Increased Focus on Product Quality

Teams can innovate freely while Magnitude does the heavy lifting on driver development and testing. SDK-Licensed Development & Testing Services dramatically improve upon the data connectors that a typical software maker can produce on its own. By expanding the range of data sources and enhancing performance and stability, software makers can improve overall products and market competitiveness.

Faster Time to Market

Simba SDK-Licensed Development & Testing Services help accelerate product development overall by way of trusted technology and expertise that minimize rework and project delays. Magnitude expertise flattens the learning curve for internal teams. That means faster time to completion and lower TCO, with tools to streamline deployment and maintenance.

“ The same Simba SDK our engineering team uses to develop data connectors is available for you to develop your custom ODBC/JDBC driver for any SQL-enabled or Non-SQL capable data source.

Engineering Services

Expert Resources for Any Driver Task You Can Imagine

At the core of Magnitude services for data connectivity is the ability to relieve development organizations of any and all burdens associated with data connectors, including those previously developed in-house. This capability can be especially valuable in the face of growing requirements that become more resource-intensive as data sources multiply and evolve with new versions and standards.

Simba Engineering Services offer a full range of assistance building or maintaining projects across standards and programming languages, including PHP, Python, Node.js and Golang to name just a few. Built to be flexible, these services can adapt to any data connectivity needs, whether on a one-time or an ongoing basis.

Simplicity & Cost Savings

Magnitude can pick up a data connectivity project in any state and improve it. That includes building on existing custom drivers and connectors without recoding or porting them to an alternate form such as the Simba SDK. Data connectors currently under the responsibility of over-taxed development organizations can quickly and cost-effectively be enhanced in terms of quality and extensibility, without adding complexity to critical projects.

Transparent Data Connector Maintenance

Bringing in Magnitude experts streamlines the effort required to maintain internally developed data connectors, eliminating the associated burden on internal resources whose talents are needed elsewhere. Because our engineering services use your existing IP, no licensing of Simba software is required. You can simply eliminate the burden of maintaining and augmenting your drivers yourself, for an optimal mixture of simplicity and control.

Flexible Accommodation of Multiple Standards

Magnitude is familiar with many standards and can help you expand your connectivity story. For example, we have extensive experience working with MDX connectivity, including ODBO and XMLA. We have also successfully completed projects adding MDX connectivity on top of relational data sources.

Take Advantage of Magnitude Engineering Services

- ✓ Amp up product quality
- ✓ Decrease time to market
- ✓ Enhance customer experience
- ✓ Reduce cost of ownership
- ✓ Flexible model based on your needs
- ✓ 35 years of expertise so you don't need to hire specialists

Conclusion

Mainstream software teams don't want to be experts at driver development, and with Magnitude services they don't need to be. We specialize in tailoring the type of support and guidance provided to each individual customer, from a conventional simple vendor relationship to a full collaboration.

With engagements that are tailored to each individual situation, you can get exactly the amount of assistance and services you need, from a hands-off standby posture to rich guidance every step of the way. Magnitude collaborates with you in a full-lifecycle commitment to provide and maintain sophisticated, standards-compliant data connectivity.

For more information about Magnitude products and services and how we can improve your data access and connectivity management capabilities, visit magnitude.com.

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