



WHITEPAPER

Cloud Migration

Migrating JD Edwards to Amazon Web Services

- How enterprises measure a CIO's success
- Why you should run JD Edwards in AWS
- What to consider when choosing a migration partner

Why Now is the Time to Migrate Your JD Edwards Environment to the Public Cloud

A few years ago, most CIOs would hesitate at the idea of putting their mission-critical JD Edwards data in the public cloud.

Now, the public cloud is a proven, secure, and reliable option for even the most sensitive data. Enterprises have been successfully migrating their JDE environments to public clouds to gain benefits including increased agility and lower costs.

Vendors such as Amazon Web Services (AWS) have invested heavily in Oracle. AWS has multiple supported options for MS SQL and Oracle DBs required for JDE EnterpriseOne, making it easy for you to scale your environment to meet changing business demands.

Despite these advances, many CIOs are unclear on the best path to AWS and lack the internal resources necessary to plan and execute a cloud transformation.

This white paper outlines how to migrate your JDE environment to AWS. You will learn:

- The #1 metric that CEOs use when they measure the CIO's performance
- Why hosting JDE environments on-premise is a thing of the past
- How AWS is uniquely suited for JDE workloads
- If you are prepared to migrate your JDE environment to AWS (and what to do if you're not ready)
- 7 things to look for in a managed services partner
- The key to a fast, secure migration
- How a manufacturer moved JDE to AWS and improved its performance

With the right managed hosting partner you can realize the benefits of public cloud, reducing time spent managing infrastructure and improving your focus on innovation and new business initiatives.

The public cloud is a proven, secure, and reliable option for even the most sensitive data.

How Enterprises Measure a CIO's Success

In 1965, the average lifespan of an S&P 500 company was 33 years. This tenure has decreased steadily, and forecasts predict that it will be just 12 years by 2027. According to a report from Innosight, about half of the current S&P 500 will be replaced within the next 10 years.¹

Numerous factors, such as mergers and bankruptcy, can cause a company to fall out of the S&P 500.

A major contributor is a lack of transformation, resulting in losing market share to new, more innovative competitors. The Innosight report states that disruptors such as Uber, Airbnb, Tesla, and Spotify could soon replace some S&P 500 members.

Since innovation is vital to an enterprise's long-term success, it's not surprising that CIOs are taking a proactive role in business strategy.

A Forbes Insights² study states, "Five years ago, CIOs believed their most important skill was technology know-how. Today, they believe it is contributing to corporate strategy."

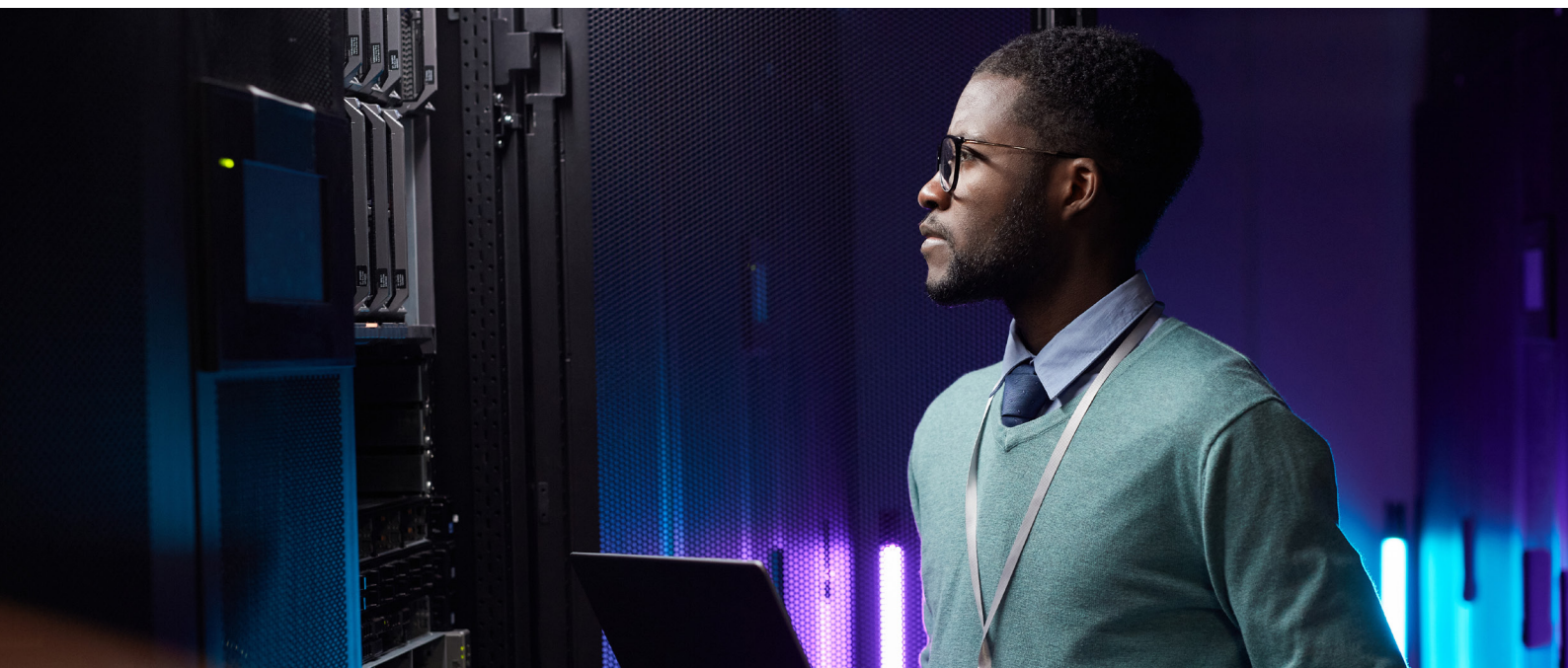
CIOs are now measured on how well they help the business win, serve, and retain customers. In other words, CIOs must transform their IT organizations from cost centers to revenue generation centers.

84% of CIOs have responsibilities outside of traditional IT, including innovation and transformation.³

¹ Innosight: 2018 Corporate Longevity Forecast

² Forbes Insights: Role Of CIOs Changing And Growing In Importance, Say New Forbes Insights Studies, March 28, 2018

³ Gartner: Gartner Survey of More Than 3,000 CIOs Confirms the Changing Role of the Chief Information Officer, 2017



The Problems with Hosting JD Edwards On-Premise

Enterprises are getting out of the “maintaining infrastructure” business so they can focus on accelerating revenue.

According to Forrester, companies will increase their spending on technology that helps them win, serve, and retain customers by 11.4%. Customer-facing technology will account for 26% to 31% of technology budgets at manufacturers, financial services, and professional services firms.⁴

This shift in spending makes hosting your JDE environment on-premise a thing of the past.

The costs of running your own data center cut into your budget for technology that helps you engage customers. It's also hard to find and retain staff with JDE and legacy skills. In fact, 83% of enterprises don't have the internal staff to support their legacy technology.⁵ Without the right team to manage your environment, you will likely experience more downtime and expose your organization to data breaches.

When you host JDE on-premise, you'll also have single points of failure. What happens if your data center goes down during an outage or natural disaster? What will you do if your only JDE expert quits?

If you're coming up on a JDE or hardware upgrade, you have the opportunity to lower your costs and gain efficiencies in the public cloud. Many enterprises see an upgrade as an ideal time to migrate JDE to the public cloud, as it lays the foundation for future enhancements. For example, the public cloud makes you more agile so you can react quickly, as it offers automation that isn't available on-premise.

A few years ago, CIOs were reluctant to move their JDE environment to the public cloud due to worries about security and performance. However, public cloud providers, such as AWS, have addressed these concerns making them safer and more reliable than ever.

⁴ Forrester via B2B eCommerce World: Businesses are focusing IT spending on customer-facing technology, 2018

⁵ Accenture Strategy: “From lead weight to launch pad: Realizing digital objectives while managing legacy optimization”, 2016 via Credera blog

Why Should You Run JD Edwards in AWS?

AWS has the world's most extensive public cloud infrastructure and supports more than one million global customers. A 2019 report⁶ stated that 67% of enterprises use AWS, making it the leading public cloud for this segment.

AWS offers over 150 native cloud services, including compute, networking, storage, security, and many others.

The public cloud provider released 1,957 new services and features in 2018 alone, innovating at an unmatched pace. In particular, AWS has made significant strides in machine learning, artificial intelligence, Internet of Things, and serverless computing.

When you migrate your JDE environment to AWS, you will:

- **Partner with a leader in Gartner's Magic Quadrant.** AWS takes the top position in "execution" and "vision" in the Cloud Infrastructure-as-a-Service category.
- **Gain a high capacity for JDE compute.** AWS supports Oracle and MS SQL databases for JDE EnterpriseOne, both on EC2 and RDS environments.
- **Improve your performance.** AWS automatically scales to match your JDE requirements, helping you avoid bottlenecks and other performance issues.
- **Increase your agility.** The right partner can automate your JDE deployment and provision your AWS resources in just minutes.

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⁶ RightScale: 2019 State of the Cloud Report from Flexera, 2019



Are You Ready to Migrate Your JD Edwards Applications to AWS?

If you run an unsupported operating system, you may not be able to migrate your JDE environment to AWS right away.

For example, you can't run IBM's iSeries on AWS. If you want to keep this operating system, you can take a hybrid approach to the cloud. This strategy allows you to gain some flexibility now and move JDE workloads to AWS when the timing is right.

Here are three migration paths that you can take:

1. Public Cloud

If you run a supported platform, you can move your JDE workloads directly into AWS and see immediate benefits from the public cloud.

2. Private Cloud

If your platform isn't supported, you can run your JDE workloads in a private cloud and migrate them to AWS later. You can also choose this option if you don't want to put data in the public cloud due to regulatory restrictions.

3. Hybrid Cloud

If you have some supported and some unsupported platforms, you can move workloads into a private cloud and AWS concurrently. Use the private cloud as a bridge for workloads that aren't yet ready for AWS. You have the option to keep the private cloud long term or get rid of it when you move the workloads to AWS.

If you run a supported platform, you can move your JDE workloads directly into AWS and see immediate benefits from the public cloud.

7 Things to Consider When Choosing a Migration Partner

JDE wasn't designed to run on public clouds, however it is very flexible in terms of design and configuration. You can migrate JDE to AWS to take advantage of the speed and agility that the public cloud has to offer.

But there is a learning curve, and your in-house team may not have the time to plan and manage the migration.

The first step in a successful migration is finding a partner who has extensive experience moving JDE environments to AWS. They can design your JDE environment to maximize your uptime and performance while allowing you to leverage the full range of AWS capabilities.

Here are seven things to look for when you choose a partner:

1. Extensive experience with AWS, Oracle, and JDE

Choose a partner with the following qualifications:

- AWS technical certifications (e.g., Developers, Solutions Architects, SysOps Administrators)
- AWS Advanced or Premier Partner
- Oracle Platinum Partner
- Oracle Certified
- A team that is large enough to scale with you

Also look for a partner with the following qualifications, as this will ensure they adhere to the highest security, compliance, and service standards:

- EisnerAmper Audited
- American Institute of Certified Public Accountants (AICPA)
- System and Organization Controls (SOC)
- Payment Card Industry Data Security Standard (PCI-DSS)
- Health Insurance Portability and Accountability Act (HIPAA)
- General Data Protection Regulation (GDPR)
- ITIL Certified

2. Expertise in your industry

Choose a partner who has worked within your sector and has references from similar customers who run JDE in AWS. For example, if you are in manufacturing, you need your operations to run 24/7/365 and can't afford downtime during a migration. Your partner must transfer your mission-critical systems to AWS without putting you at risk.

You can also ask for a proof of concept. Look for a partner who runs tests with real data, as this will show you if your workloads run efficiently in AWS. Asking for a test system allows you to check your processing times and get comfortable with AWS before you migrate your JDE workloads to it.

3. A proven migration process

A successful migration requires excellent planning. Find a partner early in your migration process so they can help you define your business case objectives. How will migrating JDE to AWS help you achieve your business and IT goals?

After you define your goals, your partner should inventory your JDE applications and plan their migration strategies. Then, they should design, migrate, and validate each application – following a meticulous, iterative path to your new operating model.

4. A plan for migrating and integrating third-party applications

Do you have third-party or home-grown applications that touch your JDE environment? If so, your partner should inventory these applications and advise you on their best migration path.

Your partner should analyze your current architecture and gain an understanding of your future requirements. Then, they can work with you to design your cloud environment for each application. They should also manage your third-party migrations and integrations to help you reach your ideal state.



5. Advanced automation

Automation reduces the risk of errors during your migration, as it eliminates manual steps. It also reduces the time it takes to assemble, build, and deploy packages. Look for a partner who applies automation in the following areas:

- Automated Provisioning, get set up with AWS in hours, not days
- Right-sizing and license management so you only pay for what you need
- 24/7/365 monitoring and alerts to keep your JDE data secure
- Prevent and detect configuration drift of your AWS resources
- Right-size by paying only for what is consumed and truly needed
- Health checks with self-healing tasks that maintain optimal performance
- Automated patches, backups, and data retention monitoring: Ensure environments are secure and available

6. Next-generation security

Security is a top concern when migrating your mission-critical data to the public cloud. In recent years, public cloud providers have taken steps to make their services as secure – often more secure – than your on-premise environment.

However, this doesn't guarantee that your JDE data is protected out of the box when you migrate it to AWS. Your managed hosting provider must take the following steps to enhance your security:

- Give you a dedicated, private cloud within AWS
- JDE encryption to keep sensitive data, including HR and payroll data, secure
- Implement strict firewall automation
- Use machine learning to spot known and unknown threats
- Proactive fraud detection and alerting for suspicious transaction activity through real-time monitoring of production data
- Have relevant data center certifications for security and compliance
- Regularly patch all servers to reduce risks of known vulnerabilities
- Provide access to your logs for auditing purposes
- IDS/IPS that protect and alert of suspicious behavior
- DDOS Mitigation

7. Ongoing cloud management

Choose a partner who can handle your day-to-day JDE and AWS admin after your migration. This will significantly reduce the hours your internal team needs to spend on IT management – giving them more time for projects that matter to the business.

Here are some things to look for in a managed services partner:

- On-demand JDE EnterpriseOne SLA support
- 24/7/365 support
- Complete visibility into your JDE cloud environment, including visualizations of your resources and performance metrics



Want a Fast, Secure Path to AWS?

Syntax offers a full suite of JDE cloud migration, hosting, and management services. As an Oracle Platinum and Amazon Advanced Oracle Consulting Partner, we can help you leverage AWS to innovate and deliver new services quickly.

Our U.S.-based team is Oracle certified and has extensive experience with JDE EnterpriseOne, including migrating it to AWS. We also are an AWS Advanced Technology Partner with more than 100 AWS technical and business accreditations and certifications.

With Syntax EnterpriseCloud powered by AWS, you can:

- **Migrate quickly.** Our automation on AWS allows us to provision your key resources in just hours.
- **Control your cloud costs.** Flexible pricing and visibility into your cost allocations mean you pay only for the licenses and services you use.
- **Avoid surprises.** Log into your portal at any time for complete transparency into your JDE environment.
- **Reduce your risk of downtime.** We have strict SLAs for availability and response times.
- **Isolate your data.** A dedicated virtual private cloud within AWS ensures your privacy and complete isolation from other customers.
- **Keep your data secure.** Military-grade encryption, along with 24/7/365 monitoring and alerting, protects your JDE environment.
- **Add new services quickly.** If AWS creates a new tool, we automate it and integrate it with JDE. That way, you can take advantage of new features as AWS launches them.
- **Work with a single partner.** With a single point of contact, you can avoid conflicts between your internal teams and other vendors.
- **Avoid vendor lock-in.** If you decide to leave Syntax, you will take over your AWS account while we remove our proprietary tools.
- **Save on AWS support.** We offer enterprise-level support at a fraction of the AWS price.

Not ready to move all your JDE workloads to the public cloud? Our hybrid cloud solution helps you gain agility while you drive more value from your existing JDE investments.

Success Story: Continental Building Products Upgrades to JD Edwards EnterpriseOne 9.2 While Migrating to Amazon Web Services

Continental Building Products is a leading North American manufacturer of gypsum wallboard and complementary finishing products.

For more than 12 years, Continental Building Products used JD Edwards as their Enterprise Resource Planning software. However, they wanted to upgrade to JD Edwards EnterpriseOne 9.2 to take advantage of new functionalities and end-user improvements. They decided to migrate to Amazon Web Services (AWS) at the same time.

The Director of Information Technology, Jeffrey Cogley, and his team had been observing a shift in how companies managed their IT infrastructure. With many organizations moving critical workloads from private hosting providers and their own data centers to public cloud, “[w]e didn’t want to be left behind,” said Cogley. “Since our JD Edwards instance was already being hosted by a third party, moving JDE to the public cloud would allow us to prove that cloud was ready to support our business better than having resources internally support it.”

Continental Building Products selected Syntax as their partner for the JD Edwards upgrade to EnterpriseOne 9.2 and migration to Syntax EnterpriseCloud powered by AWS.

The teams started by developing a clear project plan and identifying expectations. They also identified additional goals for the project, including improving system performance and increasing the organization’s agility.

The simultaneous upgrade of JD Edwards and move to Amazon Web Services produced the following results:

1.

A seamless upgrade to JDE EnterpriseOne 9.2, with no interruptions or downtime.

2.

Improved performance. Quicker access to information opens extra time for other projects and business needs.

3.

Flexibility and cost optimization via the ability to scale data storage on AWS up and down based on need and availability.

Next Steps

Contact us today to discover how we can reduce your risks when you move your JDE environment to AWS.



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About Syntax

Leading the Industry

Since 1972, Syntax has been providing comprehensive technology solutions to businesses of all sizes with thousands of customers trusting Syntax with their IT services and ERP needs. Today, Syntax is a leading Managed Cloud Provider for Mission Critical Enterprise Applications. Syntax has undisputed strength to implement and manage ERP deployments (Oracle, SAP) in a secure, resilient, private, public or hybrid cloud.

With strong technical and functional consulting services, and world class monitoring & automation, Syntax serves corporations across a diverse range of industries and markets. Syntax has offices worldwide, and partners with Oracle, SAP, AWS, Microsoft, IBM, HPE, and other global technology leaders.