



Whitepaper

Data Archiving for your JD Edwards Environment

Managing your ever-growing volume of data

Abstract

This Whitepaper evaluates different data archiving and data management options. It looks at the key drivers your organization should consider to achieve the best possible outcome for your JD Edwards data today and into the future.

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Introduction

Every business is unique and has its own distinct data set, but all organizations have the same desire with regards to managing their ever-growing volumes of data:

To make the data leaner, cleaner and fit for purpose.

Data that is 'fit for purpose' applies to all industries irrespective of their size or location in the world. If you pare back an organization and remove the information about what it sells, buys, exports, manufactures, where it operates, number of employees, financial information etc. we are always left with a common factor – the data – how much of it there is, how useful it is and what to do with it.

Data is a common denominator.

Whether you have recently started your journey with JD Edwards, or are five, ten or twenty years down the road already, this whitepaper will help you build your knowledge of what to look for in a data archiving solution.

The impact of data growth

Increased data volumes are a natural result of company growth, which is a healthy and welcome outcome. Many organizations, however, do not consider what actions to take in relation to this data growth, indeed, only turning their attention to it when it starts to be a problem! It is the latter that we are concerned with in this whitepaper.

Let us begin by looking at the main effects of leaving data unchecked.

1. Users of the system within an organization experience the brunt of slower systems.

Reduced system performance is something that creeps slowly until it eventually reaches a tipping point. Users see response times deteriorating and begin to reach out to the helpdesk for support. A slow responding system does not just affect productivity because of the slow response time, users also start to feel dissatisfied with the slowness of the system which can negatively impact staff productivity and performance. It is very hard to quantify the effect of this on your business, but it is real.

2. IT employees are likely to experience different challenges caused by the same root problem.

Overnight batch jobs and system backups that once comfortably fit into an available window, may be starting to exceed the allocated time. This can impact the business day, for example customer reporting or sales and manufacturing processes. In short, it presents a serious and undesirable risk to the smooth running of business operations.

3. Increase in hardware investment.

If growing data volumes are left unmanaged, then storage levels will need to be upgraded to cope with the increased quantities of data. Processor upgrades may also be required. This can be costly and could have software licensing implications if your software is licensed on server or processor metrics.

4. Greater storage costs.

If you have data in the Cloud or are planning a migration then the larger your data footprint, the more costly the storage, and possibly cloud computing power needed to process it.

5. Upgrade times and the clear correlation with data volumes.

Upgrades will be much more complex, will carry greater risk and will be lengthier with large quantities of data to move across. Bear in mind that a significant amount of this data is likely to be redundant and may not regularly be accessed by users.

6. Legal liability.

With data comes a legal responsibility to manage and protect it. The more data you have, the greater the exposure to this legal liability.

The right solution for your organization

The first step in finding the most suitable solution for your business requirements is to understand what is available to you. Regardless of your starting position, there are some approaches that you can consider, but they come with different degrees of risk and suitability.

Your main options can be grouped under three headings:

1. Use the JD Edwards tools that are available in the system.

There are tools in JD Edwards to remove old data. They are a series of disparate tools that have been developed at different times. This has led to legitimate concerns about maintaining data integrity and there is a lack of consolidated documentation available.

It is fair to say that the JD Edwards tools may be suitable for use on some of the larger tables in the system, but experience tells us that you can only target a subset of data without creating integrity issues. An example would be in General Ledger where you can archive data from the F0911 but only the 'G' batch type, Journal Entries. To do more could create integrity issues with other modules within JD Edwards.

These routines all seem to have common problems:

- No audit trail
- Do not process all related tables and therefore leave orphaned data
- No rollback / reversal processing
- No cross modular processing
- No access to archived data
- Lack of internal validations

In summary, when evaluating the different choices, you will quickly find deficiencies in the JD Edwards inbuilt tools. They fall far short of a solution that can be used without introducing potential data integrity issues and possible data loss.

For these reasons, they should be used with caution and in a limited manner.

2. Develop your own tools and processes.

Developing your own processes and practices can be considered, provided you have an in-depth understanding of JD Edwards tables and table relationships.

You will also need sufficient functional skills and knowledge of all the areas from which you want to remove data, so as not to create a problem.

To give a flavour, there are a few approaches you could take:

- Develop a process / scripts in SQL and keep the project at a database level.
- Write audited programs that would be a more secure and safe approach.

To achieve this, you will need a variety of skillsets within your business to cover all the areas a data archiving project will cross over:

- Database Administrator – to understand the database requirement.
- JD Edwards CNC – to configure tables / environment for storing and accessing archived data.
- JD Edwards Technical Analyst – to understand table relationships.
- JD Edwards Functional Analyst – to understand and specify functional requirement, internal and external validations, and to define process.
- JD Edwards Developer – to produce any programs.
- Users – To do testing.

Initially this can seem like a viable option, and if your requirement is small and niche, then it might be suitable, but in reality, the task is always more complex than most people appreciate. Due to the huge amount of work and extensive JD Edwards expertise required, this second option could become a lengthy and demanding process.

Thorough testing would be crucial to ensure a good outcome and to reduce risk.

3. Purchase a third-party archiving solution.

This should be a ready to go – off the shelf - product. It could be said that the existence of these products is a result of the short fall in the JD Edwards tools.

However, a word of caution! Even with a third-party solution, there are many different levels of products available on the market. For example, generic SQL based solutions require the user to gain a reasonable amount of proficiency before they can be used effectively and without introducing serious risk to your data.

A third-party product that is fit for purpose will be the safest approach. It should have the required functional and technical knowledge already built in.

Effectively, these tools should provide a framework that support the processes required in an archiving project. These would include:

- Building a process which can be ‘productionized’
- Configurable data integrity checking
- Full Audit
- Reversible
- Access to archived data
- Data boundary protection (commitment control / transaction processing)
- Useability!

Evaluating third-party archiving solutions

As part of the evaluation process for a third-party solution, look for positive answers to each of the five questions in the table below. This will ensure the solution covers all the essential bases for safe and effective archiving.

If a third-party solution fails to meet many or even one of these key criteria, then know that you risk purchasing a product that could quickly become ‘*shelfware*’ in your organization.

Questions	Yes	No
Is the solution easy to use? <ul style="list-style-type: none"> - Is it a separate tool or built in? - Will it support the archive project (end-to-end) or only the mechanical task of the archive? - How much disruption should you expect? 		
Does the interface require a large amount of training? <ul style="list-style-type: none"> - Ask to see a demonstration including the interface. Is it intuitive? - Is the navigation straightforward? - Does it involve leaving JD Edwards to access reports? 		
Is the functionally failsafe? <ul style="list-style-type: none"> - Does it have easy reversal options? - Will the archived data be restored to its original place? 		
Will it work at a JD Edwards ‘Document’ level?		
Is it fully auditable? <ul style="list-style-type: none"> - Can it identify business process and data integrity issues in the JD Edwards environment? - Does the interface allow users to see detailed and summarised audit data views? 		

Introducing 'Purge-it!'

'Purge-it!' is a third-party data archiving solution that works in parallel with JD Edwards.

There is no external tool to learn nor costly consultant involvement to run the processes. It is built within JD Edwards hence the interface is the same look and feel as JD Edwards. After minimal training, archiving can be managed by the existing JD Edwards 'super-users' in the business.

Addressing the perceived risks

If circumstances change or if mistakes are made, the modern-day business needs to be agile enough to respond. Purge-it! has been designed with exactly this in mind.

At any point during archiving, the process can be reversed easily and quickly. The reversal will restore the archived data to its original place.

Reducing the size of the test environment

A key benefit of running a slimmer, cleaner system is that the production environment will be much smaller and easier to manage.

Refreshing your test environment(s), which may have historically been considered an arduous manual task, will be simpler.

With cleaner and more recent data, you can be confident that you are using a closer to 'real' test environment that is being regularly refreshed.

Using the solution day to day

Too many companies consider data archiving to be a one-off task.

Consider, however, that this approach dismisses the reason why the problem became a problem in the first place. By not putting in place a plan to manage the data regularly into the future, it only addresses the now.

Unfortunately, this guarantees that you will end up, in a relatively short time, back exactly where you first began. Add to this how quickly that time comes around and it is easy to see why this is a less than satisfactory process.

The answer, seemingly obvious, is to put together a project, with a third-party product, that you can incorporate into your regular processing activities. The Purge-it! solution, due to its tight integration into JD Edwards, makes this possible with minimal extra effort.

What makes Purge-it! different?

Purge-it! supports the entire archive (and purge, if required) project lifecycle. Unlike a standalone tool, it has far greater reaching capabilities and benefits for JD Edwards users. It has been specifically designed by experienced software experts to be an end-to-end solution.

The software interface is familiar to users with the archive and purge routines being batch jobs, with processing options and data selection. The subsequent monitoring of results is performed via Purge-it! JD Edwards applications and dashboards.

The familiarity of the software to a business and not needing to go outside of JD Edwards helps simplify and speed up the decision-making process. With an integral solution that can leverage existing internal expertise and knowledge, the vendor selection process is made far easier.

To further strengthen the offering, Purge-it! boasts an intuitive environment dashboard. The visual design of the dashboard allows easy monitoring of archiving activities through tables, charts, progress bars and alerts. From a single 'work with' screen, JD Edwards user can:

- See how much data has been archived by table.
- See run times and user information in the session log.
- Enquire on the Purge-it! audit data.
- Submit archive reversals.
- Cancel or forward schedule the cancellation of a currently running archive job.

The screenshot displays the 'Purge IT Enhanced Session Dashboard - Purge-it! Session Dashboard' within the Oracle JD Edwards interface. The main table lists session details:

Session Number	Session Name	Module Name	Version	Profile Run Status	Session Mode	Run Date	Run Time	% Progress	Purge Amount MB	Module Data Size Before	Module Data Size After	% Reduction
1800	JOE-CL	JOE-CL	ZTEST0001	Module/Version Complete	Purge Proof Run	05/20/2020	14:38:53	100.00	6.30			
1802	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/14/2020	20:28:04	100.00	2.05	5.25	3.86	26.52
1801	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/14/2020	20:24:19	100.00	.66	5.91	5.25	11.16
1800	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/14/2020	20:19:42	100.00	2.05	5.25	3.86	26.52
1799	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/14/2020	20:08:02	100.00	2.78	8.03	5.25	34.61
1798	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Proof Run	05/14/2020	20:04:38	100.00	2.78			
1797	JOE-CL	JOE-CL	RT0001	Module/Version Complete	Purge Update Run	05/13/2020	19:40:38	100.00	5.33	28.74	23.45	18.41
1796	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/13/2020	18:59:54	100.00	2.05	8.03	5.98	25.56
1795	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/13/2020	18:38:42	100.00	2.05	8.03	5.98	25.56
1794	JOE-INV	JOE-INV	RT0001	Module/Version Complete	Purge Update Run	05/13/2020	18:36:41	100.00		8.03	8.03	
1793	ADOPX01N	JOE-CUST	ZTEST0001	Module/Version Complete	Purge Proof Run	05/07/2020	17:23:40	100.00	.01			

The 'Execution Details' panel on the right shows session information for Session Number 1820, Module Name JOE-SALES, and Purge-it! SCP Version ZTEST0001. It includes fields for Purge Host Name (KE1ES020A), Purge Job Number (2154), Purge Environment (JDEV020 - E020 Development Environment), and Start/End Date and Time (06/02/2020 20:59:41 to 20:59:56).

The 'Individual Table Purge Counts' section features a bar chart showing the number of purged records for various tables. The Y-axis represents the 'No. of Purged Records' (0 to 450). The X-axis lists tables from F4008 to F48219. The highest count is for table F4211X, with approximately 400 records purged.

Screen shot: Enhanced Session Dashboard

Conclusion

Maintaining and servicing the data in your JD Edwards system is vitally important. The chatter that may have existed at one time about data archiving processes being too costly, risky, lengthy or complex is out of step with the fast-paced technology centric world we now inhabit.

Managing ever growing, vast quantities of data is a challenge that is best tackled head on with a thorough data retention policy and a proactive approach.

Choose your data archiving solution carefully; look for a flexible solution that suits your business situation and enables you to archive end-of-life data without the risk of losing information integrity or usability.

The age, quantity or quality of your data should not be the driving factors. Finding the right data archiving solution for your organization should be the key concern.

Do not kick the JD Edwards data management discussion into the long grass for another day. Act now and you are likely to reduce storage costs and processor power, benefit from faster ERP upgrades and easier test environment data refreshes.

In addition, the user experience will be far better as will IT credibility.

Futureproof your plan. A final thought about looking further ahead.

Active data management allows you to see trends of data volumes over time and will enable you to accurately estimate requirements into the future and therefore better plan the cost impact on your organization. *

Next steps

1. See a demonstration of Purge-it! in action. Email info@klik-it.com
Speak to a Purge-it! customer – let us arrange a reference call for you.
2. Receive a Data Analysis Report of your JD Edwards system, broken down by module.
To proceed with a complimentary data analysis email info@klik-it.com

More Information

- To find out more about Klik IT, our products and services, visit www.klik-it.com
- Call us: Tel. +44 (0)333 305 5221
- Check out our product videos on [YouTube](#) [What are my archiving options? \(10-min. video\)](#)

*For more information on seeing trends of data refer to our Manage-it! Whitepaper.