

# XPeranto™

*Enterprise Integration: Doing more with less*



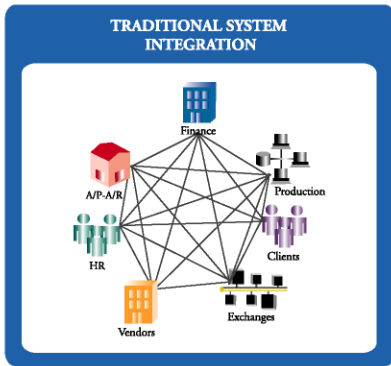
Copyright © 2002, **RSG Systems, Inc.** All rights reserved.  
XPeranto is a trademark or registered trademark of RSG Systems, Inc. in the United States and other countries.  
All other names are used for identification purposes only and may be trademarks of their respective owners.



**RSG Systems, Inc.**  
14 East 38th Street  
New York, NY 10016  
[www.rsgsystems.com](http://www.rsgsystems.com)

*In the post-internet bubble economy IT budgets have shrunk while the need for internal and external systems to talk to each other has grown dramatically. Now a new breed of tools, such as the XPeranto™ Integration Server from RSG, is letting companies achieve fast pragmatic results and real savings at a price that even CFOs can love.*

Popular folklore has crafted an image of the agile enterprise, where a CEO can pull up any information at the touch of the button; the truth is far more prosaic. At present, most corporate systems remain disconnected. Finding information requires a rash of administrative



assistants and analysts poring over printouts and spreadsheets. Where interconnectivity has been automated, it is usually fixed - a static transfer of a particular piece of information, which cannot be modified without the involvement of IT.

The proliferation of systems and standards during the internet-bubble made the need for communication among systems even more pressing. Unfortunately, as cash was diverted to websites, less glamorous IT functions, such as data-interconnectivity, were neglected. With the post-bubble slashing of IT budgets, business users are left with the very real problem of systems that cannot communicate with each other, and no funding to deal with it.

Now, developments in technology are allowing the easy and low-cost integration and exchange of corporate information, both throughout the Enterprise and to the community of stakeholders - key B2B vendors, and clients known as the "Extraprise". These new technologies work without replacing or modifying any existing systems. The result is that companies that adopt the new technology are dramatically improving the efficiency and efficacy of their organizations.

*A major Cable TV network headquartered in New York had ten stand-alone systems, each containing vital information such as Program Acquisition Costs, Sales Forecasts, Nielsen data, Ad Sales, and scheduling. Finding out the contribution margin of any program, or comparing sales across time-slots, became a Herculean task requiring a bevy of analysts pulling data manually, and manipulating them in Excel. Often a week would pass between the CFO's request for information and the report hitting his desk.*

*RSG turned this around by using XPeranto™, a hub-and-spoke, data integration server, to create an Executive Financial Control Center. This portal allowed the CFO and his staff to select and pull information from all systems directly into a pivot table, where he could analyze the numbers, chart trends, and discover new value opportunities.*

## Obstacles to Integration

Organizations looking to take advantage of the new integration technology face a host of issues, often more cultural than technological. Those that do integrate, however, find themselves with better, more timely and actionable information delivered with less effort and fewer resources. Some of the obstacles include:

### *Perception of Cost and Difficulty*

Although business users are frustrated by the lack of inter-system communication, they feel that integrating the systems will be too expensive and require too much effort; they may have heard that true integration requires scrapping legacy systems, or large groups of expensive IT consultants. Historically this may have been correct. Nowadays, system integration—even among legacy systems—is easy, requiring a short effort that leaves existing applications intact.

In fact, passing data among systems used to require writing a script to act as a bridge between any two systems being connected. As the number of systems increased, the number of connections multiplied. To connect 3 systems might only take three bridges. But 4 systems required six bridges, 5 systems required ten. And to connect 10 systems required 45 custom scripts. To make matters worse, any time business requirements changed, or anytime one of these systems was modified or upgraded, it threatened to take down every interconnecting system. Each bridge had to be re-written and tested, and then all the systems had to be tested as a whole. A lot of man-hours were required to maintain these bridges.

The alternative presented was a wholesale scrapping and rebuilding of systems. Not only would this entail the pain and effort of redevelopment and training, but also, there was no guarantee that the new systems would have the functionality or flexibility that business users required.

Where new hub-and-spoke systems such as XPeranto™ excel is in their ability to connect each application to the hub with a single adapter requiring only minor customization. These systems obviate weeks of development work. Maintenance, upgrades and modifications are easily accommodated, and changes in requirements can be addressed by business users.

### *Lack of Issue Awareness*

Business users have become inured to the absurdity that they face daily with their systems. People are used to re-keying information; to going through heroics just to make standard reports. One large book publisher uses PeopleSoft for its accounting and a home-grown system to track royalties. The people using these systems have been doing things manually for so long that they have stopped even considering that it could be automated.

Conversely, a client that started using XPeranto™ for its CRM integration soon found many opportunities in areas that it had never before even considered. "We've integrated our human resources system with our electronic phone directory. Now, when someone is put on the payroll, their name is automatically added so that people calling in can reach them. In the past that might have taken weeks."

There is also an insidious code of silence in some companies. When the CFO asks for a report, few people are willing to say that producing the report is a manual effort and a massive drain on resources. One New York City government agency would pull its data off a 20-year old mainframe and then re-type it every week into a word processor to make it look "computerized". When the Bureau Chief was asked why he did not tell his superiors what was required to produce the report he retorted "If you think this is trouble, just imagine what it would be like if the Commissioner thought we didn't know what we were doing."

### *Lack of Business Sponsorship*

Enterprise integration is the orphan or stepchild of most organizations. Usually information systems are developed or purchased to meet the needs of a particular department; each system becomes part of a fiefdom. For example, Sales will install Goldmine without considering how it might interface with Marketing's new E.Piphany system; neither considers consulting with Finance about their PeopleSoft application. Acquired divisions bring their own systems into the mix. No one person or group has the organizational mandate to ensure that these systems work together; no one has the allocated budget required.

### Security Concerns

Departments tend to be proprietary about data. Sometimes this is simply a sense of ownership; sometimes it is a real concern that only the right people have access to sensitive information.

When the issue is one of interdepartmental rivalry it usually requires a high-level mandate to break the impasse. When the issue is data sensitivity, advanced hub and spoke servers can provide the data owners with a permissioning system that lets them decide who has access to which parts of the data. Similarly, encrypted data transfer ensures that the data is never intercepted, even when traveling over the Internet or other public transport.

### Partner Standards

Getting a group of divisions inside an enterprise to agree on standards is daunting. Getting external partners to adopt your own standards can be impossible. Even "industry standards" such as XML, WSDL, and SOAP have been slow to be accepted. More to the point, industry sectors have found it difficult to agree on standards and what once was envisioned as a fast period of standards definition has dragged on for years.

Hub and spoke integration using flexible adapters can do an end-run around the standards issue by letting partners keep their own systems without any modification.

*“A major cable network's Finance Group shaved weeks off their billing cycle and reduced manual workload by integrating remittances from 50 cable operators without the operators making any change to their systems. This is a major break from the usual expense and system modifications required by traditional EDI or even standard electronic remittances. By using XPeranto™'s flexible adapters and portal capacity, the network was able to ingest remittances either directly from their customers' systems, or via FTP or eMail.”*

### Future Hype

The slow adoption of XML and its related standards has revealed another obstacle to integration. Companies burned by the hype around earlier innovations, be it the Internet, ERP, or CRM, are chary of the hype surrounding new technologies.

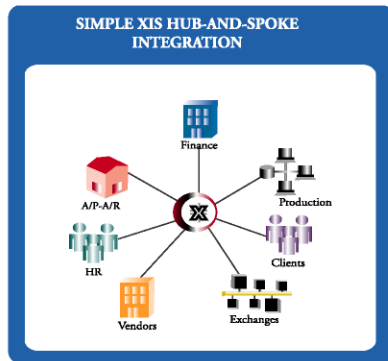
Companies are demanding an immediate return on their IT investment. The promise of "this will make sense once everyone has adopted it" has given way to, "how does this help me today?" Integration servers offer exactly that instant gratification.

*“A major sports league was able to use XPeranto™ to salvage a multi-million dollar E.Piphany CRM effort, in 6 hours. Each of 25+ teams was submitting data to the league from multiple sources in over 80 formats and file types. New data was arriving daily. Some were in flat files, others in spreadsheets, others in every flavor of database. All this had to be loaded into the CRM system in a standardized format. Without data, the E.Piphany system was like a Ferrari without gasoline: impressive to talk about, but it did not do much. An executive review of the project was scheduled, and despite weeks of trying to create PERL scripts to load the data, the CRM group had nothing to show for their efforts.*

*XPeranto™ met the league's challenge. It was installed on the network at 2:00 PM. By 6:00 PM a business user had been trained, had configured the system himself, and had run the first data feed. (The executive review was successful). This immediacy of results is critical to the successful implementation of technology systems in the post internet-bubble economy.”*

## A New Approach to Integration

The new technology creating breakthroughs in integration comes from a rethinking of the integration paradigm.



Whereas the old integration model required one-to-one mapping of fields across disparate systems, the hub-and-spoke model maps fields from each

system to a common standard. These standards may be industry mandated, such as EDI or the BizTalk initiative. Other systems, such as XPeranto™, allow the user to customize their own flexible set of standards. These standards become a master-set of all possible fields that any partner involved with a transaction might need to use.

Each spoke on the system then uses an adapter to map their system's data fields to the master Business data

structure on the server. Data flows through the hub, routed to the final destination by the server, arriving in either the recipient's desired format, or loaded directly into the recipient's system by a second adapter.

This hub-and-spoke model offers full flexibility. Systems can be upgraded or modified with only a minor adapter modification. Affiliated systems are insulated from any change to other systems. Data can itself be transformed en route as appropriate. (An example of data transformation might be where a website uses 1=True 0=False and the recipient system simply uses "True" and "False". These systems can easily be set up to detect and transform the data on the fly.)

### *Business User Controlled*

Business users expect IT to be responsible for all integration set-up and modification. The new paradigm relieves IT of this burden and clears the bottleneck for business users. By incorporating features such as auto-mapping, drag-and-drop menus, and business user portals, the new breed of integration servers has taken data transfer out of the realm of the gear-head and placed it squarely in the user's lap.

*“A major media conglomerate's Human Resources group got rid of a major benefits headache when it started using XPeranto™ to send employee information to benefit vendors such as Aetna, CIGNA, and Prudential. Previously, each time a vendor was added, a new script had to be created. With vendors being added and dropped in groups on a seasonal basis, IT constantly scrambled to meet tight deadlines. By including HR's business users in the new process, IT was able to give HR direct control over the addition of new vendors. What used to take weeks now takes hours.”*

### *User Driven Organic Growth*

As Business Users come to understand the ease with which integration is now possible, they are finding more and more areas where the "lights out" exchange

of information brings a serious value-add. Freed from the time constraint of manually re-keying data, they are able to find new efficiencies and ways of exploiting data.

*The CFO of another Cable TV network, having seen how XPeranto™ could give him a consolidated view of ad sales, turned and asked, "could this let me get all my invoices from my vendors electronically?" When told, "yes" he then went on to ask about 5 other major applications - problems with pressing business processes that he simply had never discussed with IT before.*

### Extraprise Integration

A short time ago, when talk of B2B exchanges was all the rage, the key obstacle to eBusiness was the live exchange of data among all stakeholders, regardless of their systems or format requirements. Groups such as WebMethods tried to, and in many places succeeded in filling that gap. The expense of these systems and the slow adoption of industry standards, however, have been a serious drag on those businesses.

As seen in the examples of cable networks, media conglomerates HR, and the Sports League, the new systems avoid this obstacle entirely, by letting organizations partner seamlessly with their extraprise, with immediate and pragmatic results.

## 7 Steps to Creating an Integrated Organization

Integrating an organization's data has become easier, but it still pays to follow the roadmap to integration success:

### 1. Assess the Need

Know what it is you are planning to integrate and why. Take a moment to calculate the costs saved and the value added by automating the integration of information.

- How much manual labor will be disappearing?
  - How will you utilize the freed-up workforce?
  - How much error reduction can you expect by removing human touch-points?
- What is the value of the new information?
  - Is it timelier?
  - Is it more actionable?
  - How will it save expenditures or generate revenue?

### 2. Select Your Partners

#### Partner with IT

IT can be a great asset in determining which systems are ripe for integration. They often know where the deepest problems and opportunities await.

#### Partner with an Expert

An outside integration partner with expertise in your field will often add a much needed perspective. Too often people get tied into improving the way things are being done now, and fail to ask whether or not the right things are being done in the first place. An external partner can help you with those assessments.

### 3. Select an Enterprise Standard Tool

Often different departments use different integration tools for different systems. CRM will use one ETL tool, while Finance uses the one that came bundled with its system. An enterprise standard offers several advantages:

- A standard tool enables true integration among a wide range of systems, while application-specific tools tie all data exchange to that one system: a one-to-many configuration instead of a full exchange of data among affiliated systems. While application-specific tools may seem expedient, only an enterprise standard will create a truly integrated enterprise.
- A standard tool enables the enterprise to develop true economies of scale. These are seen in
  - Lower license fees
  - Lower resource requirements: as users develop expertise on the standard toolset they are able to support each other and make fewer Support Desk calls. Similarly, as IT develops expertise, it is able to complete projects faster and with less chance of error.

When selecting an enterprise standard for your integration server, consider these criteria:

- Support for a wide variety of systems: the integration server should be able to facilitate the exchange of data among all systems in your enterprise or extraprise. This may include data exchange not just via applications, but by fax, pagers, and eMail as well.
- Ease-of-use: A primary benefit of the system will be in the reduction of effort entailed in the integration of systems. Make sure that the integration server you select is easy to learn and easy to use.
- Platform flexibility and scalability: whether you are running a UNIX, LINUX, or Microsoft shop, the integration server should be able to reside comfortably on whatever system you choose. Similarly, as your needs grow, the integration server must be able to scale commensurately.
- Speed: Be sure that your integration server can handle the required volumes of data at a speed that keeps the information relevant.
- Security: The integration server should have both security and encryption options.

#### *4. Pilot*

Before plunging headlong into full integration it is useful to conduct a pilot to see where some of the obstacles and opportunities may be. A pilot also gives you the opportunity to train an initial group of users and engineers who can assist in the later stages of integration.

#### *5. Train Business Users*

The addition of integration servers should be a relief to the IT organization, not a burden. Make sure that

business users are included and that they understand their new role as the owners of specific integration initiatives.

#### *6. Encourage Organic Growth*

Solicit ideas from all personnel, both for new integration initiatives and for extending old one. Often the front-line staff will see opportunities that are hidden from the higher echelon. When users are entitled to access data, empower them to integrate systems.

#### *7. Extend to the Extraprise*

Once an enterprise has developed some mastery regarding hub-and-spoke integration servers, it can extend these benefits to its extraprise partners. This can take the form of accepting/delivering data in the partner's desired format. For the more ambitious, it can be the development of a full data-exchange Extranet.

### Summary of Benefits

Integration of an organization's systems, both internally and among partners, has long been a holy grail of eBusiness. It promises the timely delivery of relevant data, the elimination of manual data re-keying - whole areas of the organization can be freed to concentrate on higher value work; vast quantities of paper saved. The obstacle to this dream has been one of cost, effort, complexity, and leadership.

With the availability of new hub-and-spoke integration servers, the issues of cost, effort, and complexity have vanished. The issue now will be to develop leaders in a time of "show me". Given how the immediate, pragmatic delivery of results of integration servers such as XPeranto™ cut through the fear of hype, developing leaders should not be an issue

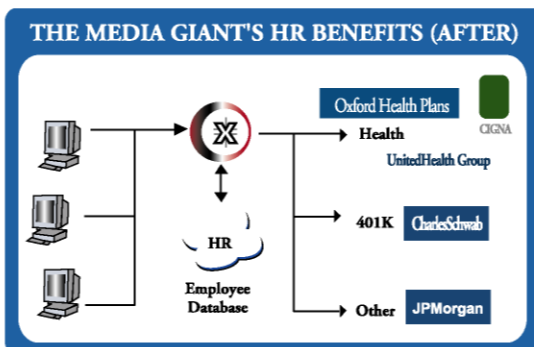
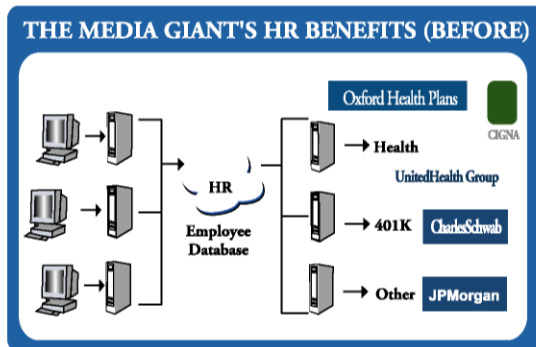
## XPeranto™ Case Studies

### I.

XPeranto™ seamlessly integrates at a media conglomerate's *Human Resources and Benefits Group* with their health and benefit providers:

#### *The Challenge:*

Each year as new benefit vendors were added and old ones dropped, The Human Resources group was faced with the onerous task of automating the transfer of employees' benefits information to the new vendors (vendors such as Aetna, Prudential, Cigna, and Express Scripts). The homegrown scripts supporting these tasks were customized to the vendor's needs, were not scalable, and were not easily adjustable. Each script required its own dedicated server. Variance in scripting methodologies made revisiting a previous year's script difficult.



#### *The Solution:*

XPeranto™ streamlined HR data feeds to all vendors in the vendor's desired format. XPeranto™ also provided a central command

center to let business users add or update vendors quickly and easily. Complex feeds were run integrating data from Sybase and Microsoft SQL Server databases into vendor specified formats. XPeranto™ transmitted this sensitive data using PGP (Pretty Good Privacy) encryption with a variety of different protocols including FTP (File Transfer Protocol) and SMTP (Simple Mail Transfer Protocol)

#### *Benefits:*

- XPeranto™'s intuitive user interface and ease of use reduced the time and effort required to add new benefits vendors from over 6 weeks of IT work to a few hours from a business user
- XPeranto™ cut the number of servers required from one per vendor to one for all vendors.
- XPeranto™ let IT deliver on Business user mandates faster and with a fraction of the usual resource requirements.
- Business users can track historical data transfer information without IT involvement by using XPeranto™'s automated record keeping features.
- XPeranto™'s low license fees reduced IT costs
- Business users can easily create data repositories
- Standardized methodology makes control and revision easy
- No modifications to legacy systems were required, other than the elimination of now redundant systems
- Written using Java™, XPeranto™ is scalable and runs on multiple platforms

## II.

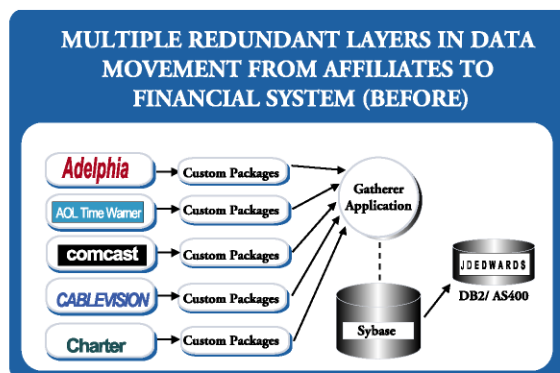
XPeranto™ simplifies the application of cash payments to the Billing System by powering a Financial *Control Center* at a major cable network:

### *The Challenge:*

The Network had a performance problem in the process of preparing Multiple System Operator (MSO) remittances for import into their billing system. 5-6 account managers manually processed remittances from approximately 25-50 cable operators or "MSOs" each month. These detailed remittances were transmitted as spreadsheets, each with unique formatting. The spreadsheets required extensive format revision to prepare data for input to the Network's billing system.

The homegrown billing process also had multiple redundant layers, leading to a great number of points-of-failure.

Manual interventions required by the business process resulted in long processing times.

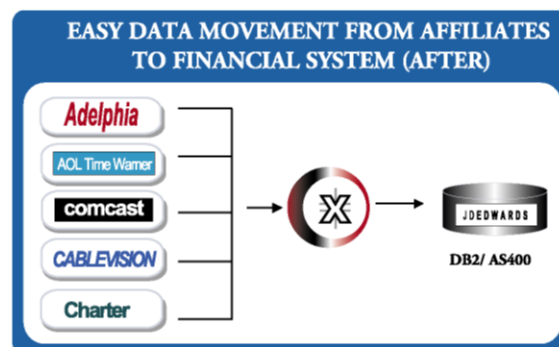


### *The Solution:*

The Network used XPeranto™ to transform each unique cable operator and MSO file into a standardized format to be loaded into the JD Edwards Financials running on IBM's AS/400. The results were:

- Fast feeds of affiliate revenue-data into the Network's Financial System
- Real-time validation of Business Rules

- Creation of a central hub to manage affiliate revenues
- Simplified processes for managing revenue data
  - From multiple MSOs
  - In multiple formats
- Elimination of redundant data movement layers



### *Benefits:*

- XPeranto™ provided faster and easier processing of remittances to speed up the billing cycle.
- Automation of all time-consuming manual sub-processes freed up resources to concentrate on important issues
- Integration of dataflow among systems reduced human touch-points and improved data accuracy
- XPeranto™ powered a Financial Command Center: one-stop portal for all financial information and reporting
- XPeranto™ enabled the ad-hoc integration of data into JD Edwards
- No modifications to legacy systems were required, other than the elimination of now redundant systems.
- Eliminated 5 weeks from the A/R cycle

