



Datastream 7i





Datastream 7i

Datastream 7i enables companies to proactively manage assets, asset information, and maintenance activities. It combines best-in-class asset management modules, unique features for improving operations and performance, and advanced modules to ensure the best possible fit for a customer's Enterprise Asset Management (EAM) needs.

Datastream 7i is the most widely deployed Web-architected enterprise asset management system in the world. The robust features of Datastream 7i meet the demanding requirements of customers from a wide variety of industries, and its zero-footprint architecture and HTML user-interface make Datastream 7i one of the most easily deployable solutions in the market.

“With its advanced Asset Performance Management capabilities, Datastream 7i can deliver the visibility and extensibility enterprises require to optimize the performance of their assets on a global scale, while also uniformly enforcing compliance procedures.”

Houghton Leroy,
Research Director,
ARC Advisory Group

Modules & Features

The modular design of Datastream 7i provides companies with the tools they need to manage operations and optimize asset performance. The Base module is used to set up system administration functions such as passwords and reporting tools. The additional modules and features, listed below, include essential components that allow customers to collect data and better manage their assets.

Datastream 7i includes a number of unique features designed to simplify asset management. These powerful features enable customers to maintain compliance with applicable federal and state regulations—such as GASB 34, CMOM, 21 CFR 11, and VMRS standards—giving users a number of industry-specific capabilities. These features lead to greater functionality and ease of use, driving value through improved enterprise asset performance.

Additional Datastream 7i features include:

- > **Application Program Interfaces (APIs)** Data Collection APIs facilitate communication between the server and mobile products allowing information to pass between handheld and disconnected products. These APIs are used for transaction management. Hardware and software for the Data Collection functions are sold as separate advanced modules.
- > **Asset** With the Asset module, companies identify, track, locate, and analyze their physical assets and facilitate metered usage measurement and automatic usage value transmission to sub-components. By compiling asset data, such as location, cost history, warranties, claims, meters, permits, and documents, Datastream 7i helps maximize productivity and asset life.
- > **Asset Hierarchy Management** Asset Hierarchy Management allows users to track asset costs and the movement of assets throughout their respective lifecycles. This is done using an easily configured “family tree” that forms relationships between equipment, systems, and locations. These relationships facilitate customer-determined data collection and analysis for equipment movement, maintenance, and cost for individual assets and any groupings of assets.
- > **Asset Management Services** Asset Management Services are designed for maintenance organizations that operate as a business unit and charge customers for maintenance work that they perform. Customers use this feature to define time, material, and labor costs in cost-charging arrangements and then apply cost-charges to commercial agreements. This calculates job costs and generate invoices and reports.
- > **Audit Trails** Audit Trails provide a flexible way to track changes to data, comments, and attributes. Track inserts, updates, or deletions of every attribute for almost every Datastream 7i table as well as all comments per entity. In the regulatory environment, the Audit Trails are exceptional for comprehensive coverage, flexibility, and ease of use.



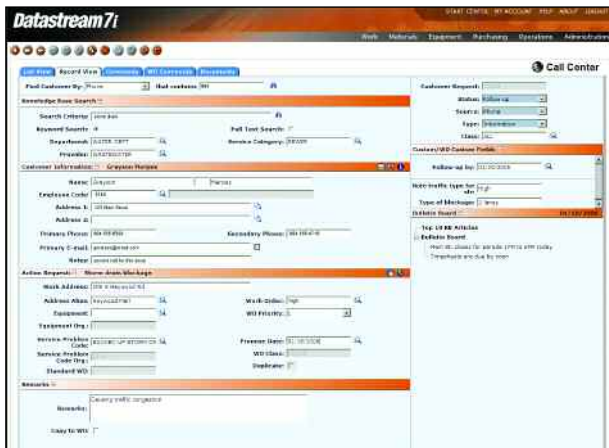
> **Budget Management** The Budget Management module automates budget setup and the subsequent capture, monitoring, control, and analysis of associated maintenance expenditures. Companies use the Budget Management module to link the financial structure of their enterprise, its organizational structure, and the physical asset hierarchies. The Budget Module allows users to set up a budget calendar and budget structure to determine the overall budget based on periods, locations, departments, equipment, work order types, projects, cost codes and/or cost types. As a result, users can calculate a variety of financial and performance indicators, helping to eliminate unnecessary costs and increase profitability.

> **Call Center** Datastream 7i offers the ability to centralize incoming maintenance requests from a broad and diverse customer base. The Call Center empowers operators and customer service representatives by providing all the information needed to handle maintenance, service and asset management requests right at their fingertips. It also ensures that all necessary information is

gathered from the caller to successfully complete the request. In addition, frequently requested information such as operating hours or location of facilities are just a click away.

The Call Center is closely linked with the Datastream 7i GIS integration interface so that geo-spatial mapping can be used to quickly access information, such as which water main is near 123 Oak Street. And the Call Center can instantly create Datastream 7i work orders from pre-established Service Problem Codes. The primary Call Center screen provides rapid knowledge base search capabilities, Top Ten frequently requested articles and groupings of information, and even a bulletin board where pertinent announcements and common information may be posted for quick distribution. With the ability to split the search screen onto a separate monitor from the Call Center record view, the Call Center offers a simple and easy navigation-free environment that speeds information access and customer responsiveness.

Call Center Interface



Operators use a simple HTML interface to submit requests or look up information for customers

> **Depreciation** Datastream 7i includes the ability to calculate and display any of four methods of depreciation for assets. These methods include straight-line, double declining rate, sum-of-the-years-digits, and units of production. Having detailed depreciation information readily available in an Enterprise Asset Management application provides support for decision-making without time-consuming research and inquiry with additional business areas.

> **Inbox and Scorecard with KPIs** The Datastream 7i home page contains two sections: Inbox and Scorecard. The Inbox functions as a “to-do” list that allows individual users to specify automatically generated numerical counts of items awaiting action such as requisitions or work orders. The Scorecard displays a graphical depiction of Key Performance Indicator (KPI) status based on user-specified parameters. Through KPIs, users define and monitor asset performance indicators, such as mean time between equipment failures, without having to run reports. Using dashboard-like gauges, KPIs provide a snapshot of how assets are performing compared to user-defined benchmarks. The system displays hyperlinks that can take the user directly to the operating screen that contains detailed data for the monitored KPIs. Both Inbox and Scorecard items allow users to hyperlink immediately to the Datastream 7i screens for the necessary operations or data input, creating an ideal tool for quick and accurate overviews of action items and business process performance.

Because of the Datastream 7i flexible interface, every user’s view can be customized based on his or her role and location in the organization. For example, Frank is an operations manager at a local



medical supply company. When he logs in to Datastream 7i, his customized home page contains his inbox with a list of tasks. Providing instant access in a flexible environment, the inbox quickly shows the tasks that need to be addressed. Using dashboard-like gauges, Frank can also define and monitor key performance indicators, such as performance by function area, without having to run reports. And he can drill down to a number of levels to detect the root cause of performance problems.

Inbox and Scorecard with KPIs



View, drill-down, and act on processes and business drivers.

> **Inspection Management** The Inspection Management module works in concert with the Work and Asset Management modules to give companies more control over condition monitoring. These modules also allow for the automatic generation of corrective work actions when an inspection result exceeds a preset limit. Features include the capabilities to create inspection routes, enter specific measurement points and the aspects to be measured, and record results. In addition, this module facilitates highly effective Risk-Based Inspections (RBI). The easily accessible data results in improved asset performance, decreased lost-labor time, and increased availability of assets.

> **Invoicing** Datastream 7i offers a complete invoicing package. This functionality links directly with system purchasing records and system receipt functions. Invoices show what has been ordered from a vendor and what has been received. At any given time, a value owed to a vendor for a purchase order may be determined instantly and any invoice received from a vendor may be verified instantly. The system provides for this three-way matching—PO, receipt, invoice—taking into consideration a “tolerance” percentage value set up to allow variance. Datastream 7i also allows entry of extra charges and discounts for an invoice, such as for extra freight charges or end-of-quarter discounts on a purchase, without delaying the completion of the invoice process.

> **Linear Assets** The linear assets module in Datastream 7i enables users to define an asset in terms of linear reference details like length, unit of measure, and geographic reference. Users can write work orders against any portion or point on that asset by specifying to and from points. For example, when work is performed at a specific point on a linear asset—like replacing a portion of a pipeline—the cost and work involved in that repair is attributed to the specific portion of the asset rather than the entire asset. This allows more accurate analysis and maintenance of the linear asset. Datastream 7i also enables dynamic segmentation from within the linear asset feature, meaning that while users are working with a specific segment of an asset they can easily change the segment where work should be performed. Linear asset functionality does not require the Datastream 7i advanced module, GIS Integration, although it does include and leverage several important GIS interface features.

“[Datastream 7i] will enable us to deploy our resources more efficiently, boost equipment uptime and maximize the impact of taxpayer dollars.”

Corrine Brody,
Assistant County Manager,
Miami-Dade County

> **Materials Management** The Materials Management module offers tools to monitor and control the inventories of storerooms found in any enterprise. These tools—including economic order quantity (EOQ) and class calculations and assignments—support parts receipts, issues, returns, and cycle counts. Datastream 7i materials management offers a choice of automatic storeroom replenishment methods: Min-Max or Reorder Point-Order Quantity. Unique to Datastream 7i, the system allows the selection of replenishment methods at the individual stock item level. This module is designed to minimize inventory holdings while fully supporting part and supply demands.



> **Project Management** Datastream 7i handles complex or simple projects by automating the Project Management process from initiation to completion. With the ability to organize budgets, labor, and equipment for projects, companies streamline the amount of time, personnel, and money spent on a project. The Project Management module also allows a project to be divided into sub-projects for detailed control, execution, and monitoring. In addition, in a multi-organizational environment, the system allows the creation of enterprise-wide projects whose sub-projects and/or work items may be drawn from any organization within the business. This simplifies budgeting and promotes common task sharing.

> **Purchasing Management** The Purchasing Management module helps companies ensure that the right parts are ordered and keeps up with delivery times, vendor performance, payments, and goods receipts. This module addresses blanket purchase orders and quotation processing.

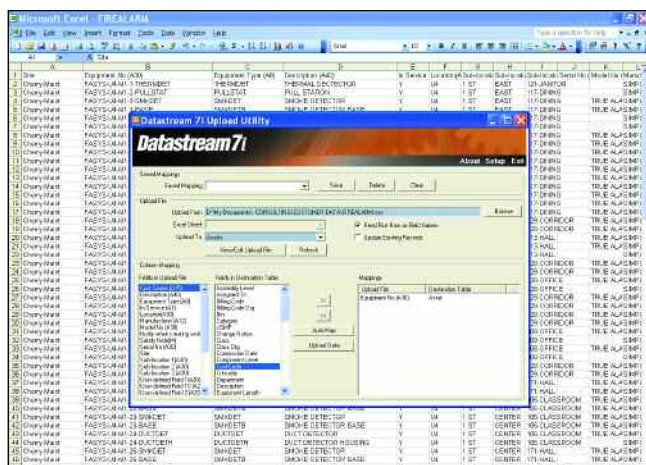
And, for those wanting advanced web-based procurement, Datastream 7i Buy is also available. See *Datastream 7i Buy* under “Advanced Modules” for more information.

> **Repairable Spares** The Repairable Spares functionality allows customers to designate parts or equipment as being “repairable”—eligible for refurbishment and reuse. Items so designated can be automatically placed in a To Be Repaired location when returned to a storeroom following maintenance action. The system allows for automated refurbishment by either internal personnel or by external contracted vendors. The customer can set valuation of repairables both while awaiting refurbishment and after being refurbished so that inventory valuation is reflected accurately. Repairable Spares do not require requisitions for internal refurbishments; users can generate such refurbishment directly simply by initiating a repairable work order.

> **Reports** The Datastream 7i Reports module enables users to select from a variety of pre-defined reports including assets, materials, purchasing, scheduling, work, budget analysis, projects, and commercial services. The Datastream 7i Advanced Reporting module is also available. It offers a variety of reporting requirements from ad hoc query, managed reports, and business reports to invoice, statements, and bills. See the Datastream 7i Advanced Modules section for more details.

> **Upload Utility** A Visual Basic application is now available that uses Web services to insert or update selected tables in Datastream 7i. This facilitates rapid insertion of data into the system without the need for manual data entry. For example, users can now load 100,000 part items from a newly acquired warehouse in a matter of seconds.

Upload Utility



Insert or update tables in seconds without manual data entry.

Work Order Scheduling



Quickly determine pending tasks and see a snapshot of asset performance.



> **Usage Monitoring** Datastream 7i offers an extensive metering function that allows an unlimited number of meters to be associated with a single piece of equipment. Metered usage values flow down a customer-defined equipment hierarchy to selected components, eliminating the need for supplemental metering. For example, a vehicle odometer can be used to register usage for tires, transmission, engine, and any other components of the vehicle. Usage values are retained by each component even if that component is moved so that accurate usage history accrues, giving customers critical information for preventive maintenance job release, warranty tracking, and justification.

“Datastream 7i is the only product we evaluated that either met or exceeded every one of our requirements for a Web-architected asset management solution.”

Joe Gouthro,
Manager of Technical Trades,
Regional Municipality of Niagara

> **Warranties and Warranty Claims** The exclusive Warranties and Warranty Claims feature of Datastream 7i allows users to track asset warranties, process warranty claims, and provide for unlimited warranties against any asset. Datastream 7i accommodates both meter- and date-based warranties and automatically tracks all work orders in the system that have a potential claim. In addition, Datastream 7i retrieves the work orders for claims processing, posts specified meter readings for claims and historical purposes, and allows for time-elapse warranties on consumable parts not registered as assets. Claims actually segregate the various costs associated with warranty management (labor, stock items, hired labor, direct outs, services, and/or tools) so that a customer always has a detailed picture of claim potential. The system includes a convenient warranty claim report that can be used as hard-copy exchange with the warranting vendor or manufacturer.

> **Work Management** From installing new equipment to issuing corrective or preventive maintenance work orders, the Work Management module tracks all aspects related to work performed on assets. The ability to track and manage work requests, labor, planning, and scheduling allows companies to make the most of their resources while improving productivity.

For example, Sally, our scheduling and parts manager, uses the flexibility of Datastream 7i to access only the information she needs to accomplish her tasks. One of her jobs is to approve requisitions for plant maintenance. She can easily view these requisitions to see specific information, such as parts, service time, and personnel, that is needed to fill the request. After Sally reviews all the details, she can approve the requisition online. The flexible workflow engine routes the purchase and work orders according to the business logic for the action.

The work management module allows users to create a work order and include multiple equipment without the need for a route. In addition, the Work Management module operates in conjunction with the Base module to give companies a way to document and track employee certification.

Datastream DS-1100

Advanced Modules

Advanced modules extend the functionality of Datastream 7i to meet specific needs, such as industry regulations, a mobile workforce, integrated procurement or advanced analytical and reporting requirements. The following are brief descriptions of the advanced modules. Please visit our website or contact your sales representative for additional details.





> **21 CFR 11** Secure electronic records and signatures are critical FDA requirements for 21 CFR Part 11 validations within the pharmaceutical, food and beverage, and personal-care products industries. This advanced module includes electronic signatures, multiple approval levels, record snapshots, a high level of security and configurability, and the ability to track all changes and edits made to electronic forms.

“Having a fully integrated calibration module is the ideal solution to our incredibly demanding calibration requirements.”

Nick Crist,
Building Operations Manager,
Central Facilities Operations,
GlaxoSmithKline Pharmaceuticals
R&D

Maintenance, repair, inspection, calibration, and other process data that affects product quality or safety receives sufficient protection from unauthorized alteration. For an example, let's return to Frank, our operations director. When he approves a purchase order, the electronic signature feature takes a snapshot of the record in adherence with 21 CFR 11, recording the order, the user, and a time-stamp. His password provides security from unauthorized personnel, and the saved electronic signature protects his organization from unauthorized users making changes on the back-end of the system. The power of Datastream 7i also allows Frank to track all inventory transactions through an audit log feature and access the details of prior orders in the e-records archive.

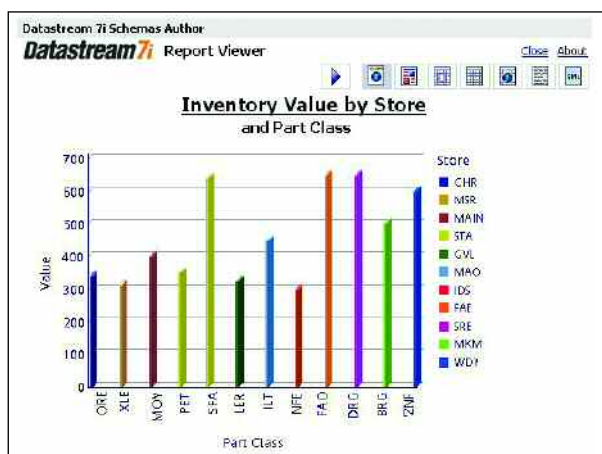
> **Barcoding** Barcoding allows users to design and print labels for assets, providing increased mobility and system functionality. Labeling assets streamlines the tracking and relocating of assets, warranty activation and updating, work registration, and other functions. Companies can also label employees to enable them to log their actions quickly, label standard jobs to provide quick access to job activities, or label spare-parts bins for more accurate and efficient storeroom management.

> **Calibration** The Datastream 7i Calibration module provides a comprehensive calibration program that is completely integrated with Datastream 7i. The module was developed with the cooperation of existing customers to address broad-based regulatory compliance within an easy-to-use format. Thorough records for calibration operations are preserved, and the system offers detailed reports designed to serve calibration needs and to offer proper documentation for future calibration auditing and review.

> **Customer Service Request**

The Customer Service Request advanced module enables customer to enter their own service requests through this easy-to-use Web interface. All they need is a Web browser and a username and password, supplied by the Datastream 7i administrator. By empowering customers to enter service requests, facilities managers reduce inbound calls to the helpdesk.

Datastream Advanced Reporting



Users can easily create ad-hoc reports.

> **Datastream 7i Advanced Reporting** Datastream 7i includes predefined reports, but many organizations require the ability to build custom reports. Datastream 7i Advanced Reporting is a completely Web-based enterprise reporting solution that helps organizations maximize the data gathered in Datastream 7i. Datastream 7i Advanced Reporting combines the power of Datastream 7i with the flexibility of Cognos ReportNet to provide Datastream 7i customers with the ability to create fully-customized reports that best meet specific asset management needs.

> **Datastream 7i Analytics** Datastream 7i Analytics gives business managers tighter control over the state of their operations through analysis tools and a powerful data warehouse. The system provides a single point of view that incorporates data from any number of disparate sources to help businesses:



- > Collect asset data using Datastream 7i
- > Analyze the data and model “what if” scenarios to predict future performance
- > Make better-informed business decisions to optimize performance and improve overall productivity

The Datastream 7i Analytics data warehouse consists of a series of data marts specifically structured for querying and reporting. This structuring summarizes entity data (booked hours per work order, number of parts issued per day, etc.) so that Datastream 7i Analytics reporting can execute rapidly. That is the advantage of the Datastream 7i Analytics data warehouse over only using the Datastream 7i database.

> **Datastream 7i Buy** Datastream 7i Buy automates the procurement of industrial spare parts by connecting buyers and over 150 industrial spare parts suppliers. Through the Internet, Datastream 7i Buy integrates seamlessly with Datastream 7i to expand the functionality of purchasing, inventory, and supply chain management. Customers can plan work, track parts usage, manage stock levels, and replenish stock via the Internet—all from within their maintenance software.

Datastream 7i Buy users are also able to:

- > Increase purchasing controls
- > Streamline the requisition process
- > Decrease catalog search and order time
- > Reduce transaction costs
- > Diminish order-entry errors

> **Datastream 7i Mobile** Datastream 7i Mobile makes it possible to download work assignments from the Datastream 7i database using docking cradles or dial-up and wireless connections, automating virtually every aspect of maintenance and data collection. In addition, Datastream 7i Mobile allows users to create field-based work orders, use drill-down menus to retrieve detailed information about a piece of equipment, and capture actual “wrench time” as work occurs. For example, many industries need a tool that allows personnel to move from room to room or site to site and still be able to record what maintenance needs to be performed. Datastream 7i Mobile gives users the ability to capture essential information on the move for optimal performance. With Datastream 7i Mobile, users on- or off-site are able to focus on the areas that matter most:

- > Work management
- > Meter readings
- > Physical inventory updates
- > Inspection results
- > Calibration results
- > Data collection

Datastream 7i Mobile

WO #	Description	Type
SR10269	Water Leak	ERKD
12778	inspect	ERKD
12763	putto down	ERKD
12531	change filters	ERKD
12483	check room for	ERKD
12334	doors don't close	ERKD
12289	cover is missing	ERKD
12272	CHECK UNIT	ERKD
12197	putto down	ERKD
11974	check line operation	ERKD
11955

Drive workforce efficiency with asset and work information on handheld devices.

> **Fleet** The Fleet module includes Vehicle Maintenance Reporting Standards (VMRS) codes and additional custom fields. Focusing on the transportation industry’s greatest opportunities for productivity and cost-per-mile savings, the Fleet module enables transportation companies to process warranty claims, manage tires and fuel, and improve vehicle performance through preventive maintenance. And with the Motor Pool Management feature, users can manage registering, maintaining, issuing, returning, and invoicing for vehicles that are kept in a central pool.

The system manages temporary vehicle issues and returns as well as long-term lease-type arrangements. Billing can be configured to include usage based on time and/or mileage, parts, and maintenance.



> **Datastream 7i GIS Integration** The Datastream 7i flexible architecture allows customers to integrate Geographical Information System (GIS) mapping software for a Web-based solution that can increase workforce efficiency and lower costs by:

GIS Map Search



- > Pinpointing assets and accessing critical information prior to servicing
- > Generating work orders directly from the GIS display
- > Streamlining workflow between departments for improved performance
- > Forming sequential routes to complete work orders
- > Creating a consolidated, easy-to-access view of asset history and location
- > Leveraging seamless GIS and asset management integration
- > Reducing administrative overhead by synchronizing critical tabular Datastream 7i data with geo-spatial layers and attributes from ESRI GIS
- > Adhering to governmental regulations like GASB 34 and CMOM through linear asset management
- > Focusing graphically on strategic sections of assets and related asset failures

Easily and quickly access GIS and asset information.

> **Integration: Databridge and Web Services Toolkit** Data integration has traditionally required painstaking effort and enormous costs due to the work and equipment required to standardize data in a format that all systems can understand. However, Databridge provides a solution to this problem.

Databridge uses extensible markup language (XML) to enable fast and flexible integration with other enterprise applications—from an Enterprise Resource Planning (ERP) System, a Customer Relationship Management (CRM) application, a plant floor system, or a hardware management infrastructure (HMI) technology such as one from Supervisory Control and Data Acquisition (SCADA) or Siemens. This gives companies the ability to fully support their business processes by integrating asset management systems and practices with those of other systems and organizations. Most importantly, Databridge is a simplified, cost-effective solution to the integration challenge. There is no simpler or more cost effective way to integrate Datastream 7i into the IT infrastructure.

The Web Services Toolkit offers more increased flexibility in integration. With Datastream 7i and the Web Services Toolkit, customers can easily link central enterprise systems and expose real-time critical asset management functionality using familiar applications.

“Not only can we compare equipment downtime across plants, [using Datastream 7i Analytics] we can also identify root causes of downtime by correlating inventory levels to equipment downtime. This type of information will enable us to significantly improve asset performance across our customers’ sites, enabling them to produce automobiles more efficiently.”

Eric Faith,
Manager,
Maintenance Systems Technology,
Premier Manufacturing
Support Services

> **Workflow** Datastream 7i Workflow functionality includes the ability to track sequences of events of various operations, such as work order and purchase order generation, to automatically alert the originator or selected approver of the action required. Users may also access Workflow information from the home page to view notifications of pending actions and status changes and respond to action items. Instant notification and responses via e-mail without logging in to Datastream 7i gives users the ability to receive updates regardless of time or location.



Technology

The basis of the Datastream 7i architecture is to provide customers with technology that drives business performance and enhances value. Datastream 7i delivers technology to meet today's business challenges and provides a clearly defined technology roadmap to ensure future success.

Web Architecture

The Web architecture of Datastream 7i enables users to access information stored in their application over any Internet or intranet connection. This gives everyone from the CEO to the plant manager a way to stay connected to every facet of operations. And, unlike Web-enabled software, which requires the purchase of software for each client computer and offers limited operating interactions, Web-architected products offer significant benefits—reduced IT expenses, a foundation of continuous, consolidated technology, and rapid return on investment.

In addition, Web architecture enables companies to create cross-enterprise visibility, allowing companies to share information between locations and systems. This flexibility eliminates the “siloed” approach to viewing such areas as inventory and asset availability, helping to create greater efficiencies at the enterprise level rather than just on a site-by-site basis.

Web Services

Web services is one of the key architecture features of leading enterprise solutions today. Virtually every software vendor claims to have a Web services story, but very few have actually implemented it. The key to implementing Web services is a service-oriented architecture (SOA) that separates application business logic from user interfaces. The logic is then accessible as “services” that can be invoked by a number of middleware mechanisms, including Web services. Because Datastream 7i was designed from the ground-up with multi-tier architecture—utilizing Enterprise JavaBeans (EJBs) in the middle tier and Java Server Pages (JSPs) and servlets for presentation—it is a powerful example of a proven SOA solution.

As the key technology driving the emerging SOA, Web services utilizes extensible markup language (XML)-based technologies that provide a standard and highly cost-effective way to integrate systems and interfaces. Companies can use this capability to enhance the value of existing applications by enabling interoperability with other internal enterprise applications, as well as with those of other companies. In fact, Web services know no geographic bounds and can span the globe, accessing an ERP application in Sydney one minute, then sharing data with an EAM application in Cleveland the next.

In short, Web services allow companies to:

- > Create applications that access the functionality of other enterprise systems
- > Seamlessly integrate applications using standard technologies (XML, SOAP, WSDL, UDDI)
- > Expose legacy applications' business logic, so it can be accessed and used in new ways
- > Allow corporate portals to easily access the business logic of all Web services applications

Hosting

To further reduce capital expenses and labor associated with installing and maintaining server platforms, Datastream 7i is available as a hosted solution. With the hosted delivery method, customers load and store their data at a secure, remote location, eliminating the need to purchase database and application server hardware and licenses. Customers have a single point of contact for their complete asset management application—handling all software, hardware, and support concerns for a customer.

Customers who choose hosted solutions often realize **30-60% savings over a five-year period** versus self-hosted solutions.



Datastream (now Infor) completed the American Institute of Certified Public Accountants' Statement on Auditing Standards no. 70 type II audit for their hosting operation. The successful review given by the independent auditor will help Datastream 7i customers easily comply with a variety of state and federal regulations.

Datastream (now Infor) was ranked as the number one market leader in the 2004 ARC Advisory Group report for the category ASP Web hosting. Hosted offerings now encompass marquee organizations such as Atrix Labs, City of North Miami Beach, General Cable, Honeywell Sensor and Guidance, Maritz, MasterBrand Cabinets, Nucor Steel, Praxair, Premier Manufacturing Support Services, and Smurfit-Stone Container Corporation.



13560 Morris Rd.
Suite 4100
Alpharetta, GA 30004
1-800-260-2640



www.infor.com

Copyright © 2001-2006 Infor Global Solutions and/or its affiliates or licensors. All rights reserved. The Infor word and design marks are trademarks and/or registered trademarks of Infor Global Solutions or one of its affiliates. All rights reserved. All other trademarks listed herein are the property of their respective owners.