CARAHSOFT'S RESPONSE TO THE

West Virginia Department of Health and Human Resources (WV DHHR)

REQUEST FOR PROPOSAL

Master Data Repository Management System

Volume 1: Technical Response

SOLICITATION NO. HHR13083

Thursday
March 7, 2013

SOLUTION PROVIDED BY

IBM

CARAHSOFT TECHNOLOGY CORP.
12369 SUNRISE VALLEY DRIVE
RESTON, VA 20191

888.66.CARAH | WWW.CARAHSOFT.COM

carahsoft
technology corp

March 7, 2013

WVDHHR/MIS
One Davis Square
Suite 200
Charleston, WV 25301
Roberta.A.Wagner@wv.edu

Re: *Carahsoft's Response to the West Virginia Department of Health and Human Resources (WV HRR)'s Request for Proposal for Master Data Repository System, Solicitation No. HHR13083*

Dear Ms. Wagner:

Carahsoft Technology Corp. appreciates the opportunity to respond to the West Virginia Department of Health and Human Resources (WV DHHR)'s Request for Proposal for a Master Data Repository System. Carahsoft is proposing IBM Initiate which fully meets DHHR's requirements for a Master Data Repository System.

Carahsoft has enclosed our response in two documents as requested; a technical volume titled Volume 1: Technical Response and a pricing volume titled Volume 2: Price Response. This document represents Volume 1 of Carahsoft's response.

As a top ranked GSA Schedule holder, Carahsoft has delivered best value solutions to our government clients for over eight years including the State of West Virginia.

Please feel free to contact me directly at 703.230.7466/rebecca.brockschmidt@carahsoft.com or Craig Abod at 703.871.8501/cpa@carahsoft.com with any questions or communications that will assist DHHR in the evaluation of our response.

Thank you for your time and consideration.

Sincerely,

Rebecca Brockschmidt
Government Account Representative

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
*C08110509 703-871-8606
CARAHSOFT TECHNOLOGY CORP
12369 SUNRISE VALLEY DR
SUITE D-2
RESTON VA 20191

SHIP TO
HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED
02/01/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	THE STATE OF WEST VIRGINIA AND ITS AGENCY THE DEPARTMENT OF HEALTH AND HUMAN RESOURCES (DHHR), OFFICE OF MANAGEMENT INFORMATION SERVICES (MIS) REQUEST A QUOTE TO PROVIDE A MASTER DATA REPOSITORY MANAGEMENT SYSTEM, CUSTOMIZABLE OFF THE SHELF PRODUCT PER THE ATTACHED INSTRUCTIONS TO BIDDERS AND SPECIFICATIONS. BID OPENING: MARCH 7, 2013 AT 1:30 PM					
0001	1	EA		099-00-01-001		
	MASTER DATA MANAGEMENT SOFTWARE (MDM HUB) INFORMATICA OR EQUAL PER THE ATTACHED SPECS.					
0002	3,560,000	EA		099-00-01-001		
	UNCONSOLIDATED CUSTOMER RECORDS					
0003	140,000	EA		099-00-01-001		
	UNCONSOLIDATED BUSINESS RECORDS					

SIGNATURE [signature] TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

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HHR13083	2

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12369 SUNRISE VALLEY DR
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RESTON VA 20191

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HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED: 02/01/2013
BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0004	10	EA		099-00-01-001		
	DATA STEWARD INTERFACE					
0005	1	EA		099-00-01-001		
	REAL TIME EXTRACT TRANSFORM AND LOAD (ETL)					
0006	1	EA		099-00-01-001		
	DATA QUALITY					
0007	1	YR		099-00-01-001		
	YEAR ONE TOTAL ANNUAL SUPPORT WITH ABOVE REFERENCED PRODUCTS.					

SIGNATURE [signature] TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

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State of West Virginia
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Solicitation

NUMBER	PAGE
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VENDOR
*C08110509 703-871-8606
CARAHSOFT TECHNOLOGY CORP
12369 SUNRISE VALLEY DR
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RESTON VA 20191

SHIP TO
HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED
02/01/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0012	3	EA		099-00-01-001		
	INSTRUCTOR LED TRAINING DAYS (UP TO 12 STUDENTS PER DAY).					
0013	80	HR		099-00-01-001		
	CONSULTING SERVICES (HOURS) FOR INSTALLATION AND CONFIGURATION OF THE MDM SOFTWARE FOR PRODUCTION AND TESTING ENVIRONMENTS.					
	****** THIS IS THE END OF RFQ HHR13083 ****** TOTAL:					

SIGNATURE [signature] TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
HEALTH AND HUMAN RESOURCES

WVDHHR/MIS
One Davis Square, Suite 200
Charleston WV 25301
Tel # 304-558-5906

DATE PRINTED
02/25/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

ADDENDUM NO. 01

1. ADDENDUM ISSUED TO PROVIDE ANSWER TO QUESTIONS REGARDING THE ORIGINAL RFQ SUBMITTED. QUESTIONS AND ANSWERS ARE ATTACHED.

2. TO PROVIDE ADDENDUM ACKNOWLEDGEMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN THE DISQUALIFICATION OF YOUR BID.

********** END OF ADDENDUM NO. 01 **********

SIGNATURE	TELEPHONE	DATE
	703.230.7413	03/05/2013
TITLE Director	FEIN 52-2189693	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Solution Overview

Carahsoft Technology Corp. understands that the West Virginia Department of Health and Human Resources (DHHR) is seeking a Master Data Repository Management System. As the Prime Contractor, Carahsoft has assembled a team for the initiative that includes our Solution Provider, IBM, as the best solution to meet DHHR's requirements.

Prime Contractor: Carahsoft Technology Corp.

Carahsoft Technology Corp. is the trusted Government IT solutions provider, combining technological expertise with a thorough understanding of the government procurement process to help federal, state and local government agencies select and implement the best solution at the best possible value. As a top-ranked GSA Schedule Contract holder, Carahsoft serves as the master government aggregator for many of its best-of-breed software vendors.

VENDOR RELATIONSHIPS – Carahsoft has a unique business model focusing on providing superior sales and marketing execution, a track record of success, high integrity and a focus on strategic vendor relationships of which **IBM** is an important part. While Carahsoft's contract vehicles carry over 160 vendors.

PROVEN EXECUTION – Carahsoft has leveraged its vast contracting experience and extended it to quoting and order management. Carahsoft seamlessly generates thousands of quotes a year worth hundreds of millions of dollars.

CONTRACT VEHICLES – Over the past 8 years Carahsoft has acquired and maintained a wide variety of purchasing contract vehicles for agencies at the state, local, and federal levels. Associated with all contracts are dedicated and experienced contract management resources. A list of available contracts can be found at www.carahsoft.com.

GROWTH & STABILITY – Carahsoft has continued to show impressive growth year after year, turning annual revenue from $3.4 million in our first year in 2004 to $606 million in 2009, $840 million in 2010, $1.065 billion in 2011 and $1.465 billion in 2012. We are a stable, conservative and profitable company and have received numerous accolades including, for the third consecutive year, being named to the Washington SmartCEO magazine's 2012 Future 50 list which recognizes the metro area's fastest growing companies. Carahsoft was also recognized in the following areas in 2012 rankings:

- 2nd largest GSA Schedule 70 Contract holder
- 32nd on the CRN Solution Provider 500 list
- 9th in the Washington Business Journal Top Private Companies

Solution Provider: IBM

IBM is pleased to submit the industry leading IBM InfoSphere MDM Advanced Edition COTS solution to meet and exceed DHHR's requirements.

In the latest Gartner Magic Quadrant, dated October 2012, the IBM solution leads the marketplace with its combination of ability to execute and vision. With its established healthcare focus and experience with State Government, IBM solution can help DHHR quickly deploy the MDM solution which will ultimately help deliver better healthcare services to the State's constituents.

With its best-of-breed matching algorithms that has been proven across hundreds of clients, the IBM MDM solution will not only address DHHR immediate needs but can be used across the Commonwealth to develop a single source of master data which will help deliver improved service while lowering the cost of service delivery.

The State of Virginia is in the process of deploying the IBM MDM solution to fully create a single source of master data and in order to deliver wide variety of secure services to their constituents. The State of Kentucky is also in the process of deploying the IBM MDM solution, in a partnership with Deloitte, with healthcare as the first step in creating a single source of master data in order to deliver a coordinated set of services to their constituents. The State of Maryland deployed the IBM MDM solution as foundational to delivering health records through their State-wide Health Information Exchange (HIE). The Commonwealth of Massachusetts, another IBM MDM customer, deployed a solution encompassing education, Direct HIE services and all payers claims databases just to name a few. This is just a sampling of IBM's experience with State governments throughout the US.

IBM has developed a successful set of methodologies to implement the InfoSphere MDM technology platform. IBM would be pleased to help DHHR leverage these methodologies to gain the maximum value from the MDM technology platform and to integrate the MDM platform and supporting methodologies with DHHR's existing technologies and standards. IBM recognizes that an MDM implementation does not exist in a vacuum. IBM's MDM technology platform as well as their solution approach can therefore accommodate external technologies and standards to integrate with DHHR's overall business and IT environment.

Along with InfoSphere MDM, Quality and ETL tools included in the RFQ, IBM has bundled the following tools for your use with our solution. These tools assist in data governance, extraction of unstructured data and Business Process Management (BPM), just to name a few. The bundled software includes:

- IBM InfoSphere MDM Application Toolkit V10.1
- IBM DB2 Enterprise Server Edition V10.1
- IBM WAS Network Deployment V8.0
- IBM WebSphere MQ V7.0.1
- IBM WebSphere Portal Server 7.0
- IBM Content Integrator 8.6
- IBM Tivoli Directory Server V6.3
- IBM Rational Software Architect for WebSphere Software V8.0

- IBM Cognos Business Intelligence V10.1 Components
- IBM InfoSphere Blueprint Director V2.0.1
- IBM Process Server Express V8.0
- IBM Process Center Express V8.0
- IBM Process Designer V8.0
- IBM InfoSphere Discovery 4.6.1
- IBM InfoSphere Information Analyzer 8.7
- IBM WebSphere Message Broker v8.0
- IBM WebSphere Message Broker Connectivity for Healthcare v8.0.0.1

IBM looks forward to working with DHHR in the deployment of this critical component of an Information Management strategy.

ADDENDUM ACKNOWLEDGEMENT AND AGREEMENTS

The following pages contain Carahsoft's completed Addendum Acknowledgment and all other additional agreement documents included with the State's solicitation.

WV-96A
Rev. 12/12

AGREEMENT ADDENDUM FOR SOFTWARE

In the event of conflict between this addendum and the agreement, this addendum shall control:

1. **DISPUTES** - Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims.

2. **HOLD HARMLESS** - Any provision requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.

3. **GOVERNING LAW** - The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.

4. **TAXES** - Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party.

5. **PAYMENT** - Any references to prepayment are deleted. Fees for software licenses, subscriptions, or maintenance are payable annually in advance. Payment for services will be in arrears.

6. **INTEREST** - Any provision for interest or charges on late payments is deleted. The Agency has no statutory authority to pay interest or late fees.

7. **NO WAIVER** - Any language in the agreement requiring the Agency to waive any rights, claims or defenses is hereby deleted.

8. **FISCAL YEAR FUNDING** - Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.

9. **STATUTE OF LIMITATION** - Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted.

10. **SIMILAR SERVICES** - Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.

11. **FEES OR COSTS** - The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.

12. **ASSIGNMENT** - Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.

13. **LIMITATION OF LIABILITY** - The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision in the agreement limiting the Vendor's liability for direct damages is hereby deleted. Vendor's liability under the agreement shall not exceed three times the total value of the agreement. Limitations on special, incidental or consequential damages are acceptable. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.

14. **RIGHT TO TERMINATE** - Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination. In such event, Agency will not be entitled to a refund of any software license, subscription or maintenance fees paid.

15. **TERMINATION CHARGES** - Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.

16. **RENEWAL** - Any reference to automatic renewal is deleted. The agreement may be renewed only upon mutual written agreement of the parties.

17. **INSURANCE** - Any provision requiring the Agency to purchase insurance for Vendor's property is deleted. The State of West Virginia is insured through the Board of Risk and Insurance Management, and will provide a certificate of property insurance upon request.

18. **RIGHT TO NOTICE** - Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.

19. **ACCELERATION** - Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.

20. **CONFIDENTIALITY** - Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.

21. **AMENDMENTS** - All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.

ACCEPTED BY:

STATE OF WEST VIRGINIA	**VENDOR**
Spending Unit: _____	Company Name: Carahsoft Technology Corp.
Signed: _____	Signed: _____
Title: _____	Title: President
Date: _____	Date: 03/05/2013

ATTACHMENT
P.O.# HHR13083

This agreement constitutes the entire agreement between the parties, and there are no other terms and conditions applicable to the licenses granted hereunder.

Agreed

Signature 03/05/2013
Date

President
Title

Carahsoft Technology Corp.
Company Name

Signature Date

Title

Agency/Division

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Carahsoft Technology Corp.

(Company)

(Authorized Signature)

Melany Smith, Director

(Representative Name, Title)

703.230.7413 703.871.8505

(Phone Number) (Fax Number)

03/05/2013

(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: HHR13083

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[x]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Carahsoft Technology Corp.
Company

Authorized Signature

03/05/2013
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

INSURANCE REQUIREMENTS

The following page contains proof of Carahsoft's Commercial General Liability and Workers' Compensation insurance.

CARAH-1 OP ID: DJ

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/12/12

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Russell Ins. Group, Inc. (MAR) A Subsidiary of ACNB Corp. 2526 West Liberty Road Westminster, MD 21157 Douglas C. Marks	410-875-5617 410-875-5340
CONTACT NAME:	
PHONE (A/C, No, Ext):	FAX (A/C, No):
E-MAIL ADDRESS:	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Twin City Fire Insurance Co.	
INSURER B : Hartford Casualty Ins. Company	29424
INSURER C : Sentinel Insurance Company Ltd	11000
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Carahsoft Technology Corp
& FedResults, Inc.
12369 Sunrise Valley Dr Ste D2
Reston, VA 20191

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC			30SBABU9482	04/19/12	04/19/13	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
C	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS X HIRED AUTOS SCHEDULED AUTOS X NON-OWNED AUTOS			30UECPC7222	07/09/11	04/19/13	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 10000			30SBABU9482	04/19/12	04/19/13	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		30WECLJ1554	04/19/12	04/19/13	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
B	Comm Prop. Bus. Interruption			30SBABU9482 (ALS) ACTUAL LOSS SUST.	04/19/12	04/19/13	Contents Repl Cost	26,700

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

SMALL, WOMEN-OWNED, MINORITY-OWNED BUSINESS

Carahsoft is not a small, women-owned or minority-owned business under this acquisition. Therefore, a Vendor Preference Certificate has not been included with our submission.

PURCHASING CARD ACCEPTANCE

Carahsoft understands and accepts the State of West Virginia's Purchasing Card for payment of all orders under this Contract.

PURCHASING AFFIDAVIT

The following page contains Carahsoft's signed and notarized Purchasing Affidavit as requested by DHHR.

RFQ No. HHR13083

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Carahsoft Technology Corp.

Authorized Signature: _____ Date: 03/05/2013

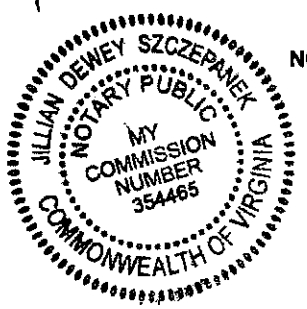
State of Virginia

County of Fairfax, to-wit:

Taken, subscribed, and sworn to before me this 5 day of March, 2013.

My Commission expires 12/31, 2015.

AFFIX SEAL HERE



NOTARY PUBLIC _____

TECHNICAL RESPONSE

The Carahsoft and IBM team are confident that our solution fully meets or exceeds the General System Requirements provided in Section 3 of the State's solicitation.

In the latest Gartner Magic Quadrant, dated October 2012, the IBM solution leads the marketplace with its combination of ability to execute and vision. With its established healthcare focus and experience with State Government, IBM solution can help DHHR quickly deploy the MDM solution which will ultimately help deliver better healthcare services to the State's constituents.

The following pages contain additional information highlighting the features and functional capabilities of the IBM InfoSphere Master Data Management system.

IBM InfoSphere Master Data Management V10 Advanced Edition

Functional overview

Contents

Master data is the data on customers, products, materials, accounts and other entities that is critical to the operation of the business. It is the most important information that any organization owns, but it is also the most difficult to manage, as it is usually distributed across many different source systems, each of which creates and holds data in its own way. The information often does not match from one system to the next: critical data elements may be missing, duplicated or inconsistent. The results are processes and decisions that are as poor in quality as the master data that they're based on.

IBM® InfoSphere® Master Data Management (MDM) helps organizations create trusted views of their data assets and make their most important business processes and applications more effective, thereby helping to improve business results, lower costs, reduce risk, and increase strategic agility to meet current and future business needs.

This functional overview whitepaper details the capabilities of IBM InfoSphere Master Data Management V10 Advanced Edition, and covers seven key areas of functionality:

- Data modeling
- Loading/integration/synchronization
- Information quality management
- Business services and workflow
- Performance and scalability
- Management and security
- Technology and architecture considerations

IBM InfoSphere Master Data Management V10

IBM InfoSphere Master Data Management V10 is a complete, proven and powerful operational MDM solution. It includes transaction-oriented MDM as well as collaborative authoring and workflow capabilities. The version 10 release of the Advanced Edition includes IBM InfoSphere MDM Server and IBM Initiate® Master Data Service, which work together through newly designed integration points. InfoSphere Master Data Management V10 delivers:

- **Comprehensive capabilities.** InfoSphere MDM offers a broad and deep set of MDM features for addressing both existing and emerging business requirements. It is designed to handle all data domains, implementation styles or use cases in any industry, and offers a range of implementation options from pre-built, customizable templates through completely custom architectures.
- **Proven results:** IBM is a recognized MDM leader in banking, insurance, retail, healthcare and government and has hundreds of long-term MDM customers, including many relationships that have lasted more than 10 years.
- **Real-time environment:** InfoSphere MDM supports active, real-time usage of master data within applications and business processes. This includes IBM Business Process Manager Express, for implementing policies and coordinating multi-step/multi-role workflows in real-time environments.
- **Rapid time to value:** IBM offers a fast, low-cost deployment for each MDM architectural implementation style.

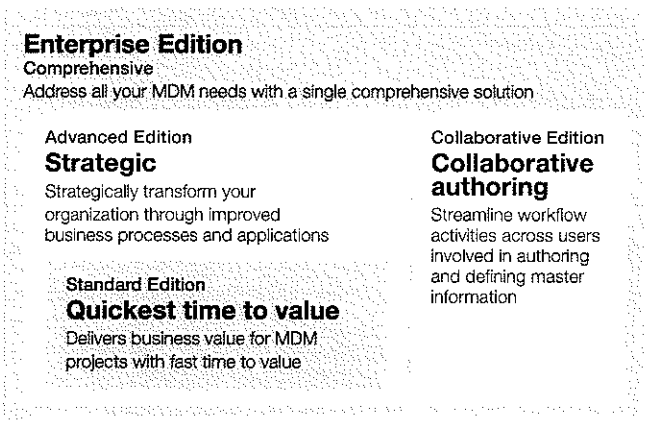


Figure 1: IBM InfoSphere Master Data Management V10 is available in four different editions.

Why master data matters

When master data (customer, supplier, product, account and so on) is of poor quality, the business processes that rely on that data are ineffective, inefficient and costly.

However, making good use of master data—and ensuring its quality—can help companies address a wide range of challenges, including:

- High operational costs due to duplicate efforts and error processing
- Compliance with regulatory requirements
- Lack of customer service
- Lack of customer intimacy
- No enterprise view to aid in cross-selling and up-selling
- Need for more efficient reporting, analysis and decision making
- Lack of visibility into end-to-end processes
- Entering new markets, introducing new products and gaining new customers
- Identifying potential threats before the incident occurs
- Identifying persons of interest when in custody and during field investigations and analysis
- Protecting against threats arising from country entry and unlawful border crossings
- Meeting citizens' service expectations (credentialing, verification, renewals and so on)

These challenges require a solution that helps organizations throughout their MDM journey as business environments and goals change over time. The solution must support a variety of data domains, implementation styles, use cases and cross-industry demands.

Functional capabilities

Data modeling

When it comes to data modeling, one size does not fit all. Different MDM implementation styles and different business types require different types of data models. InfoSphere MDM provides a range of pre-built data models that will meet the needs of many organizations out of the box. These models can be easily customized and extended. Organizations with specific needs can also quickly build fully customized data models. In all cases, the logical data models are defined with metadata, and the underlying physical data model is deployed automatically, minimizing both development and administration time.

Broadly speaking, InfoSphere MDM offers three options for data modeling.

Pre-built comprehensive data model for centralized and hybrid implementations. The pre-built data model includes a physical and logical data model that supports cross-industry, multi-domain (party, product, account and so on) requirements and is enhanced by industry-specific templates. A pre-built data model is ideal for centralized and hybrid implementation styles, as these require a complete, broad master record for each data domain.

The data model addresses multiple domains with a range of core objects specific to that domain. For example, the party domain has party, role, contract and account, location, interactions, preferences, relationships, hierarchies and groups objects, among others. Those objects have code type definitions for the object type, the object category and the type and potential category of relationship between objects. For example, a party may be defined as a customer, and play a role of "subscriber" on a contract type "wireless telecommunications account," where the descriptions in quotation marks are code type definitions. The data model ships with code table content for multiple industries.

Pre-built data models are designed to be immediately useful, but they also can be extensively customized for specific industries, needs and business cases. For example, organizations can add new subject areas to the data model. Also, all of the logical model objects/attributes can be aliased (renamed), and InfoSphere MDM includes definable objects that are integrated with the model's core objects. Definable objects are especially useful for managing industry-specific data (such as telco provider profile data), as their data attributes and type definitions can be defined with metadata. Finally, organizations can even turn off entire sections of the data model, making it easier to create lightweight MDM implementations.

Lightweight, thin data model templates for registry implementations. For registry implementations, the most important quality of a data model is not breadth or comprehensiveness, but rather the flexibility to easily and quickly model a small number of attributes for each entity type. To support registry implementations, InfoSphere MDM offers pre-built data models with logical model templates containing a relatively small number of attributes (15-30) for each commonly used entity type (such as persons, organizations, products or households).

Using the InfoSphere MDM Workbench configuration utility, the pre-built templates can be extended with attributes and relationship models drawn from the corresponding source systems. The logical model is loosely coupled to the physical models, which are designed to be flexible and abstract so that they can accommodate any entity type. The loose coupling between the logical model and the abstract physical model provides higher performance and better total cost of ownership (TCO) than a direct source-to-physical map would provide. It also ensures that upgrades are seamless regardless of how each client has manipulated their logical entity type, attribute and relationship definitions.

Import or build-from-scratch for new custom domains. Organizations whose master data domains are unique or dramatically different from the typical party/product/account domains can build custom models from scratch or import data definition language (DDL) data models. The custom domain model can be imported from DDL or built by the end user via the InfoSphere MDM Workbench utility. For custom domains, the InfoSphere MDM framework automatically generates the data structures, associated business services and user interfaces (UIs), reducing the time and effort needed to set up the model.

In all three cases, the data models are defined logically using a metadata-driven approach, and the underlying physical data model is deployed automatically with no need for manual database administration tasks. The data model is also extensible in each case using the InfoSphere MDM Workbench development environment.

Loading and synchronization

Setting up and operating an MDM system often requires quickly loading huge volumes of data from multiple sources. Also, the efficiency and success of an MDM system will be dictated by how easily and reliably it can be linked to other data sources and repositories. InfoSphere MDM offers a range of data-loading options, from lightweight extract, transform, load (ETL) through complex batching and real-time processes. It also uses industry-standard protocols to communicate with other information systems, and offers intelligent ways for a single message to drive multiple or complex actions, maximizing efficiency.

Loading

InfoSphere MDM provides flexible options for loading master data. Data can be loaded via business services in scheduled batches or in real time. Batch loading is supported by a sophisticated framework with options tailored to different deployment styles. For example, in registry implementations, where the quantity of data is typically relatively small, batch data files can be loaded using routines that are defined and executed completely within the MDM Workbench configuration console, rather than requiring separate tools. In hybrid and centralized implementations, where organizations typically face larger data volumes, IBM has introduced a new set of pre-built jobs known as Basic Information Loader (BIL) for loading data. BIL leverages IBM InfoSphere Information Server and IBM best practices to accelerate both initial loads and delta updates. InfoSphere MDM also includes a deeply integrated lightweight ETL tool for simple loading requirements in registry implementations.

Synchronization

InfoSphere MDM maintains keys on data held within other systems for all objects/attributes within the MDM hub. Change messages are published to a Java Message Service (JMS) queue, where they can be used to update data within the source system or for other synchronization activities. Source system reference keys may be provided in the notification message to synchronize other systems. Additionally, a single input can trigger multiple synchronization notification messages.

InfoSphere MDM uses cross-reference keys as the primary keys for update transactions. As a result, if requesting applications provide their system ID, they can send update transactions without providing primary keys. InfoSphere MDM will find the client record via the cross-reference tables and update the appropriate record within the MDM hub. This feature is used extensively in delta update processing to facilitate mass updates and eases integration, because other systems do not need to be aware of the InfoSphere MDM primary keys.

InfoSphere MDM commonly integrates with IBM WebSphere® Process Server and can be integrated with other middleware tools via the messaging options mentioned above. If additional batch processing capabilities are required, InfoSphere MDM is designed to integrate tightly with IBM InfoSphere DataStage® with minimal configuration. The same integration features can also be used to connect to other ETL tools.

Information quality management

Maintaining information quality requires constant vigilance. It also requires active participation from people who can define and approve quality standards, but who may not be technically sophisticated. InfoSphere MDM has an extensive set of automated features designed to maintain the quality of an organization's master data. It also provides manual tools to help end users who are tasked with ensuring the quality and trustworthiness of the organization's master data—often called *data stewards*—to effectively and efficiently monitor and manage information quality.

Automated quality management

InfoSphere MDM provides native capabilities for the cleansing, matching, linking and semantic reconciliation of customer master data from different data sources to create and maintain the "golden record." The IBM approach to quality management for customer data includes:

- Utilization of sophisticated algorithms to understand customer data and its relationship to other records
- Probabilistic and deterministic matching to correlate records that conform to common individual or party entities
- Free-text search to support "Google-like" search scenarios
- Automatic linking for records that meet configurable thresholds, which can be configured on a source-specific basis, to allow for different thresholds based on the quantity and quality of data from each source
- Automatic application of survivorship (or collapse) rules to establish the golden record, applicable for both the physically persisted golden record (in a hybrid or centralized style) and a virtual composite view (in a registry deployment)
- Integration of the probabilistic matching engine with IBM Global Name Recognition to improve name variant recognition in multicultural customer data environments

InfoSphere MDM also supports integration with IBM InfoSphere QualityStage™ and third-party software for additional automated quality name standardization, cleansing and data enrichment.

Manual stewardship

InfoSphere MDM automatically queues up data stewardship tasks for review in the product's stewardship UIs. With InfoSphere MDM, users can:

- Search for entities and view entity details and relationships
- View a list (or inbox) of potential duplicate/suspect tasks
- Manage suspect task assignments to steward users across a team
- Compare suspect duplicate parties to determine if they are the same party
- Search for suspect duplicate parties based on user-defined parameters
- Merge suspect duplicate records deemed to be the same party
- View and edit both hierarchical and nonhierarchical entity-to-entity relationships

InfoSphere MDM also includes additional stewardship capabilities specific to different MDM implementation styles, supporting business requirements and technical implications.

Registry

- Link, rather than merge, duplicate parties deemed to be the same.
- Resolve potential overlay tasks flagged due to information degradation within an existing source system record. For example, the enterprise resource planning (ERP) source record identified by ERP local identifier #123 is updated with a significantly different set of demographic attributes, indicating either a data error or a potential fraud. You can configure the threshold that determines demographic variations.
- Define ad hoc tagging rules to apply to the data stewardship tasks. Tags can greatly improve users' productivity by helping them identify the most critical records (based on their own definition of critical) and resolve those tasks first, and then distributing workload across different users based on each user's area of focus.

Centralized/hybrid

- Maintain master data entities (individual, organization, account, product, custom); add, search, view and edit information
- Identify and manage duplicates (suspect duplicate processing)
- Create and maintain relationship, grouping and hierarchy information

Business services and workflow

MDM solutions often focus exclusively on data. But the most important element of MDM is actual use: integrating MDM processing with existing business processes and applications. IBM InfoSphere MDM provides low-level, fine-grained data services that enable developers to handle data directly. However, it also provides business services: more coarse-grained, capable services and application programming interfaces (APIs) that enable organizations to deploy MDM faster, and at lower cost and risk than is possible with data services alone.

Business services

Delivering flexible and extendable business services, as well as the ability to use, reuse, recombine, and easily generate and string together new business services (or composites) is a key differentiator for InfoSphere MDM, providing significant cost savings for IBM clients. In some cases, thanks to reuse of InfoSphere MDM business services, clients have saved approximately 80 percent in Phase 2 deployments vs. their Phase 1 deployment costs.[1]

Service integration needs vary depending on the implementation approach, and InfoSphere MDM includes distinct services functionality to meet specific needs.

For a registry implementation, the original data sources maintain ownership of data; therefore, the focus of services is on finer-grained data services that facilitate create-read-update-delete (CRUD) activities against master data, the MDM hub's metadata and the data stewardship task data. The CRUD services ensure easy synchronization of the registry MDM hub with data from the source systems. The registry services are exposed in two ways:

1. **Generic services/APIs independent of an organization's metadata configuration.** These services never need to be rebuilt; they are available as out-of-the-box web services, Java APIs and Microsoft .NET APIs.
2. **Generated services that reflect the labels and structure of an organization's metadata configuration.** These services are generated with a simple menu selection in the Workbench configuration utility. While the services must be generated based on each organization's entity/attribute model, once generated they are simpler for developers to work with because they feature more intuitive labeling and more concise web services description language (WSDL) definitions. The generated services are available as both web services and Java APIs.

For a hybrid or centralized implementation, the MDM hub has partial or full ownership of the master record, and thus the focus of services must be on coarser-grained services that facilitate not just data services but true business services. The InfoSphere MDM coarse-grained services are built from finer-grained data services, plus appropriate business logic necessary to perform business transactions against the hub-owned master record.

The InfoSphere MDM SOA Business Services Library offers approximately 800 intelligent, prepackaged web services that can be used to seamlessly integrate MDM into existing business processes and technical architectures. The Library is a helpful resource of ready-to-use and extendable components, APIs and services that deliver advanced business logic capabilities, eliminating the need for costly custom application development, and helping to accelerate the project's time to value.

Workflow

InfoSphere MDM provides tools and capabilities to help organizations manage the MDM process workflow and integrate MDM functions into the larger environment of enterprise workflows or business process management.

InfoSphere MDM includes native task management capabilities to assist data stewards and data steward managers with the workflow and allocation of tasks within InfoSphere MDM. These task management capabilities allow data steward managers to view the workload across the data stewardship team, assign and reassign tasks, and participate in the workload themselves. Also, task management capabilities let data stewards manage their own queue (or inbox) of work, escalate tasks to a different status or assigned users as needed.

In addition to the native task management capabilities, InfoSphere MDM V10 includes IBM Business Process Manager Express V7.5 (IBM BPM Express V7.5). Many organizations do not have the technology for authoring, implementing, and executing the processes required for improving MDM data quality, governing MDM data and managing MDM data over its life cycle. IBM BPM Express provides the capabilities necessary to implement policies and coordinate multi-step/multi-role workflow for data stewardship and data governance. Bringing MDM and business process management together in InfoSphere MDM provides significant benefits in the following areas:

- **TCO:** Organizations can decrease the cost of staffing and training by implementing workflow for MDM-centric processes. Complex tasks can be broken into prescriptive steps that reduce training requirements as well as boost end-user competency.
- **Effectiveness:** IBM BPM Express helps ensure that all work items are assigned to an individual and those individuals are aware of items they own. Critical work previously lost through informal, ad hoc processes can now be properly managed.
- **Quality:** Ensuring that information is accurate often requires manual verification and approval of changes by groups of people in various roles across business units. IBM BPM Express helps coordinate these activities and ensure that data stewards and the individuals that work with the data every day participate and receive feedback on their efforts. This can improve both data quality and visibility across the organization.
- **Measurement:** Whether MDM activities are performed manually or programmatically, it is critical to monitor, measure and improve them—justifying the investment with quantifiable benefits. IBM BPM Express reports provide the foundation for organizations to examine their MDM processes, developing information and insight that can drive continuous process improvement.

Performance and scalability

InfoSphere MDM is designed to meet the most demanding performance requirements, starting with the data loading needed to establish the MDM hub. The bulk comparison and load process is scalable across processors and even across servers, minimizing the amount of time needed to get up and running. For example, a hospitality and travel organization used the bulk comparison process to match and consolidate 1 billion source records down to 250 million unique parties in just 22 hours.

InfoSphere MDM is designed to support large transaction loads and high-availability operational environments. Data is processed in stateless, atomic transactions, allowing scalability across J2EE application servers (both vertically and horizontally) and linear scalability. InfoSphere MDM provides performance features, such as caching and performance management functionality, that allow clients to optimize performance. Some of the largest MDM implementations in the world are built on InfoSphere MDM, including several projects with more than 1 billion party records being managed.

InfoSphere MDM is also designed to support high-availability environments and can be load balanced across multiple hardware instances. It has cross-instance capabilities that enable data and services to be used across multiple separate production deployments of the product.

Management and security

The primary purpose of an MDM implementation is to deliver accurate and trustworthy data. But when choosing an MDM system, organizations must also take into account many other factors, especially a solution's TCO and security capabilities.

InfoSphere MDM provides tools and features that organizations can use to efficiently install, maintain, manage and upgrade MDM systems, helping keep TCO low from day one. InfoSphere MDM also helps organizations protect their most sensitive data from exposure with sophisticated tools and automated monitoring. Plus, InfoSphere MDM integrates with a wide array of commonly used information security platforms.

InfoSphere MDM addresses multiple aspects of maintenance and management.

Installation

InfoSphere MDM includes a graphical user interface (GUI) install, a silent install, an uninstall function and support for a clustered environment.

Administrative user interface

Administrative tasks are managed in the appropriate UI depending on whether an organization implements MDM in a registry style or a centralized style. With a registry implementation, administrative tasks are executed in the design-time configuration UI, InfoSphere MDM Workbench. Because the registry approach does not typically involve a broad data model or persisted master records, there are fewer administrative tasks, so administrative tasks are grouped together into the InfoSphere MDM Workbench UI.

With a hybrid or centralized implementation, master data is authored directly into the MDM hub, resulting in the need for more administrative functionality. To facilitate the hybrid/centralized administrative tasks, a dedicated Administration UI separates administrative tasks from design-time tasks supported by the InfoSphere MDM Workbench configuration utility. The Administration UI lets system users manage code table values, error messages, user and data groupings, data validation, and other configurable parameters. The administrative functions in the user interfaces are also exposed as business services.

Event management and notification

InfoSphere MDM Event Manager can be scheduled to automatically send out new or changed records. Events can be triggered by data changes (transactional) or by temporal events (passage of time, inactivity). When an event is detected, two things may occur: notification messages may be sent with notification topic data and data changes, or the event may be stored within InfoSphere MDM. Notifications included with the product include data change notifications, suspect identification, party collapse, critical data change and party life-event notifications. Organizations may define events using the InfoSphere MDM business rules engine, and define the content of notification messages. Additionally, InfoSphere MDM provides filtering capabilities with flexible parameters, enabling users to customize which notifications they receive.

Data corruption management

InfoSphere MDM has a number of options for reporting on unusual data change patterns. For example, while a person's address may change many times in a single year, a person's gender and date of birth typically do not. Multiple changes to these typically static data items may indicate data corruption, fraud or other issues. InfoSphere MDM can be configured to send a notification triggering further action, such as an investigation or audit.

Reporting

InfoSphere MDM includes reports to assist with ongoing management and oversight of the MDM implementation. InfoSphere MDM also lets customers create their own additional reports unique to their needs. Pre-built reports include:

Data Stewardship reports:

- Report on Suspects Requiring Resolution
- Report on New Suspects
- Report on Suspects Collapsed by User (hybrid/centralized approach)
- Report on Suspects Linked by User (registry approach)
- Report on Automated Links by Match Engine (registry approach)

Data Content reports:
- Report on New Parties
- Report on New Contracts
- Report on Customer Claims
- Report on Customer Demographics
- Report on System Counts (parties by source systems)

Security

InfoSphere MDM addresses multiple aspects of security relevant to an MDM solution.

Logging

All transactions can be recorded in logs; organizations can configure which entities, and which fields within the entities, are to be logged. Information can be retrieved by transaction ID, system ID, point-in-time dates and other access patterns.

Authentication and access control

Service execution and data access are limited to users authenticated through an LDAP directory. InfoSphere MDM manages rules of visibility and data entitlements at the attribute level. These entitlements are granted to user groups/roles based on sets of entities, fields or specific values. In addition, user groups/roles may be defined in external LDAP systems. InfoSphere MDM also uses access tokens to determine which users have access to what data; access tokens can be associated with specific party records, and cross-checked against the requesting user's token to determine additional access control.

Privacy/preference management

This option manages party preferences by location, accounts, products and other objects. Preferences can span multiple objects. Organizations can easily load default preferences and multiple types/categories of preferences. Organizations can also manage relationships and priorities among preferences; for example, a more stringent data privacy policy specific to a particular department can be set to override a more general company-wide base policy.

Auditing

This option maintains a transaction audit log and history database for all transactions and data changes. InfoSphere MDM includes services to retrieve data changes and logged information on who made the changes for both a point in time and a date range.

Technology and architecture considerations

InfoSphere MDM is an MDM hub for party, account, product and custom master data domains built on a Java Enterprise Edition platform with a persisted relational data store. It is data source–neutral, designed to work equally well in an environment with both proprietary and open systems as both contributing and consuming data sources. InfoSphere MDM is an application, not just a toolkit.

Integration

InfoSphere MDM is designed to run in a heterogeneous environment, but is also pre-integrated with IBM products. This design reduces the total cost of ownership and allows for easy integration within an organization's heterogeneous environment to protect their investment.

InfoSphere MDM provides pre-built, coarse-grained and fine-grained services that accelerate and reduce the risk of integration with multiple applications such as CRM, ERP and web portals. A range of integration capabilities are available to support even the most challenging environments, including RMI/IIOP, web services, messaging, batch and various data exchange formats such as XML, Java Objects and user-defined format (for example, OAG, SIF, delimited, Fixed Format, COBOL Copybook).

Development environment

InfoSphere MDM is a Java application and supports J2EE and EJB specifications as well as XML and web services. InfoSphere MDM is pre-integrated with Java IDEs; all tools are created as Eclipse plug-ins, allowing clients to use standard Java development tools to configure and extend InfoSphere MDM.

To support a user-friendly development environment, InfoSphere MDM provides the Workbench configuration utility. This utility is an Eclipse plug-in to IBM Rational® Application Developer that simplifies the construction, storage and maintenance of programming artifacts.

The Workbench utility includes tools for configuring the following:

- Data additions, to add a new data entity
- Data extensions, to extend an existing data entity with additional attributes
- Behavior extensions, to add new functionality to transactions or the underlying actions within the transaction
- Query extension, to modify how the data is accessed
- MDM metadata specs, information that describes the shape or form of data

The Workbench configuration utility also includes the InfoSphere MDM Application Toolkit. The toolkit provides a library of application components that customers and partners can use to quickly construct user interfaces that connect to an organization's master data. These UI components are exposed as Dojo widgets. Dojo is an open standards movement designed to ease the rapid development of cross-platform JavaScript/ AJAX-based web applications. The MDM Application Toolkit can be used both to create stand-alone web applications that automatically access and expose master data as well as to enhance existing web applications. Benefits include:

- The ability to quickly create and prototype web-based applications
- A true model-driven iterative approach to development of bespoke applications
- A rich library of out-of-the-box widgets that can be used in applications
- A pluggable UI allowing hand coding of artifacts to suit the business's needs

Technical highlights

Application server support
- IBM WebSphere Application Server
- Oracle WebLogic
- Apache Tomcat

RDBMS support
- IBM DB2® on Linux, UNIX and Windows, and mainframe (zSeries®)
- Oracle Database on UNIX, Linux, and Windows
- Microsoft SQL Server on Windows

OS/hardware server support

IBM InfoSphere MDM Application Server
- IBM AIX®
- Red Hat Linux
- SUSE Linux
- Sun Solaris
- IBM System z®/Linux
- Microsoft Windows
- HP-UX

InfoSphere MDM Database Server
- IBM AIX
- Red Hat Linux
- SUSE Linux
- Sun Solaris
- HP-UX
- Microsoft Windows
- Linux for System z

Unicode support, language support

InfoSphere MDM is Unicode-enabled and fully globalized. The product uses UTF-8 encoding and supports single-byte and double-byte character sets. InfoSphere MDM is translated for the following languages: English, Chinese (simplified), Chinese (traditional), Japanese, Korean, French, German, Italian, Spanish, Portuguese (Brazil), Polish, Greek, Russian and Turkish.

In addition to translation, the probabilistic matching engine within InfoSphere MDM includes locale-specific standardization routines to recognize the nuances of locale-specific language such as name phonetics, name structures and address structures. The routines have been developed for Arabic, French, German, Japanese, Chinese, Korean, Portuguese and Spanish.

About IBM InfoSphere Master Data Management

IBM InfoSphere MDM delivers a single, unified view of an organization's critical master data—customer, supplier, product and more. Armed with this trusted view, organizations can make better decisions and improve business outcomes—higher revenue, better customer or citizen satisfaction, lower cost and risk, and improved strategic agility. With InfoSphere MDM, organizations can understand their core master data (customers, citizens, accounts, products and so on) at all touch points; improve cross-selling and up-selling; optimize the value of ERP, CRM, analytics and warehouse systems; support governance initiatives; and make business processes more effective.

For more information

To learn more about IBM InfoSphere MDM, please contact your IBM representative or Business Partner, or visit: ibm.com/software/data/master-data-management

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[1] Performance reported by customers directly to IBM.

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IMW14594-USEN-00

IBM InfoSphere DataStage

Enterprise-scale data integration, transformation and delivery

Highlights

- World-class performance, productivity, collaboration and deployment options
- Highly intuitive, top-down, work-as-you-think design interface
- Comprehensive library of transformation components and architecture that supports sharing and reuse
- Industry-leading connectivity to operational systems, databases and enterprise applications
- Powerful parallel processing and balanced optimization for linear performance scalability
- Low impact, real-time data feeds to optimize ETL processes
- Integral part of IBM® InfoSphere™ Information Server

Every day, torrents of data inundate IT groups and overwhelm business managers. Businesses need to sift through data to glean insights that can help increase company revenues and optimize profits. Yet even after pouring millions of dollars into business automation projects, such as enterprise resource planning (ERP), customer relationship management (CRM), supply chain management (SCM), business intelligence (BI) and data warehousing solutions, many companies are still plagued with disconnected, "dysfunctional" data. They are stuck with a massive, expensive sprawl of disparate information silos and nonintegrated, redundant systems that fail to deliver a single trusted view of the enterprise.

As a first step in deploying new enterprise applications, integrating business acquisitions or tackling IT business process initiatives, organizations need to ensure that data is reliable, relevant and readily available—in a consistent, condensed form—across the enterprise.

IBM InfoSphere Information Server can help organizations understand, cleanse, transform and deliver data for critical business initiatives. It tightly integrates a full range of enterprise information across a wide variety of data sources and targets. Whether building an enterprise data warehouse, implementing a BI platform or integrating dozens of source systems to support CRM, SCM or ERP, InfoSphere Information Server helps ensure that organizations have information that is trustworthy and actionable. With InfoSphere Information Server, you can design an infrastructure for data integration that is reliable, scalable and flexible enough to accommodate today's dynamic business environments.

Integrate, transform and deliver trustworthy information with IBM InfoSphere DataStage

IBM InfoSphere DataStage® is a core product module of the InfoSphere Information Server information integration platform. It offers world-class data integration and transformation capabilities for unsurpassed levels of productivity.

Key features of IBM InfoSphere DataStage

- Offers unsurpassed connectivity to operational systems, databases and enterprise applications spread across mainframe and distributed systems
- Uses a common metadata repository for seamless integration with other InfoSphere Information Server modules with data profiling and data quality capabilities
- Provides an easy-to-use, top-down, work-as-you-think design interface
- Includes a comprehensive library of transformation components for easily defining common integration processes
- Incorporates a complete tool set to administer, deploy and update the data flows throughout the data integration life cycle
- Supports a Service Oriented Architecture (SOA) approach, facilitating reuse of complex integration data flows
- Builds on a dynamic parallel processing infrastructure that enables users to design once and deploy as needed at run time without changing any integration jobs
- Delivers real-time data feeds to optimize extract, transform, load (ETL) processes

Supported sources, targets and applications include:

- Text files, including mainframe files
- Complex XML data structures
- Enterprise application systems such as SAP, Oracle, Siebel, PeopleSoft, JD Edwards, Hyperion and Salesforce.com
- Almost any database, including partitioned databases such as IBM DB2® on any platform (with and without the Data Partitioning Feature), IBM Informix®, Netezza®, Oracle, Sybase (ASE and IQ), Teradata and Microsoft® SQL Server®, MySQL and Progress
- Web services
- Warehouse environments such as Teradata, Netezza and IBM InfoSphere Warehouse
- Analytic tools such as SAS and IBM SPSS
- Messaging and enterprise application integration (EAI) products including IBM WebSphere® MQ
- Public and private clouds

InfoSphere DataStage is a core component of the InfoSphere Information Server platform and leverages a wide array of capabilities that are native to the platform. Some of those key capabilities are:

Extensive enterprise connectivity

Successful enterprise-class information integration requires access to a full range of data sources—structured, semistructured or unstructured—within and outside of the enterprise. InfoSphere DataStage provides connectivity to a virtually unlimited array of heterogeneous data sources, targets and applications, which can be combined within a single job (see Figure 1).

Advanced development and maintenance

InfoSphere Information Server uses a powerful architecture that helps developers maximize speed, flexibility and effectiveness in building, deploying, updating and managing their data integration infrastructure. InfoSphere DataStage leverages the productivity-enhancing features of InfoSphere Information Server to help reduce the learning curve, simplify administration and optimize the use of development resources. The result is an accelerated development and maintenance cycle for data integration applications. With InfoSphere DataStage, organizations can achieve strong ROI by gaining access to trustworthy information and sharing it across applications and databases.

Integrated design interfaces and common metadata repositories

InfoSphere Information Server has a single design interface that is shared by both InfoSphere DataStage and IBM InfoSphere QualityStage™ modules, enabling designers to use any combination of data quality and data transformation capabilities to help ensure that the right data is brought together at the right time. InfoSphere Information Server also provides a unified metadata repository for InfoSphere DataStage and all other modules. Users can immediately access technical and process metadata developed during data profiling, cleansing and integration processes to speed development and reduce the chance for errors.

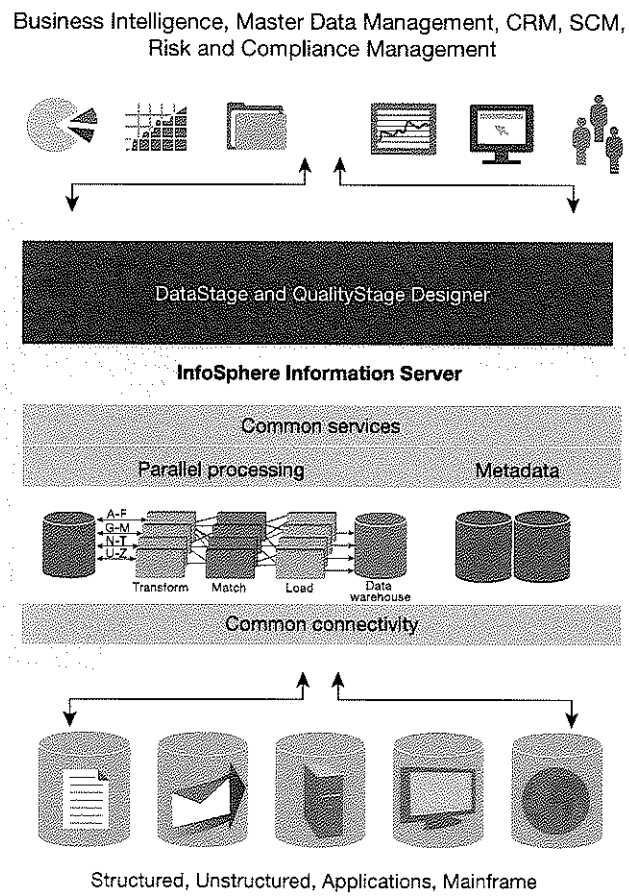

Figure 1: InfoSphere DataStage enables access to multiple source systems, integrating and transforming selected data to deliver trustworthy information to critical business functions

Ease of use

InfoSphere DataStage employs a work-as-you-think design interface (see Figure 2). Developers use a top-down model of application programming and execution, which allows them to create a visual data flow. A robust graphical palette helps developers diagram data flow through their environments with simple, GUI-driven, drag-and-drop design components. To maximize productivity, InfoSphere DataStage includes more than 50 prebuilt components and hundreds of transformations. Developers also benefit from powerful debugging capabilities and an open application programming interface (API) for leveraging external code.

Productivity and reuse

InfoSphere DataStage helps shorten the development cycle by promoting the reuse of existing data integration business logic. It employs a container concept that enables jobs and metadata created in one container to be shared and reused by other jobs. Quick Find and Advanced Find capabilities make it easy to locate objects for reuse across different projects. Robust job specification reporting provides documentation so other developers can easily understand job design and provide additional support.

Right-time data integration

The InfoSphere Information Server architecture enables InfoSphere DataStage to operate in real time, capturing messages or extracting data at a moment's notice on the same platform that integrates bulk data and using the same transformation rules. Data integration jobs can be deployed with Java™ Message Services, web services and other methods. This SOA approach enables numerous developers to share complex data integration processes without requiring them to understand the steps contained in the services. The result: data can be used in more ways—without costly hand coding—to respond to an organization's information integration needs on demand.

Market-leading flexibility and scalability

InfoSphere Information Server facilitates high-performance integration of large amounts of data. By leveraging the parallel processing capabilities of multiprocessor hardware platforms, InfoSphere DataStage enables businesses to linearly scale the speed of data throughput. Organizations can scale transformation jobs to address the demands of ever-growing data volumes and ever-shrinking batch windows. Development is done using sequential logic—the deployment configuration automatically adds the desired degree of parallelism. An organization could take the application from 2-way processing in the morning to 32-way in the afternoon to 128-way processing at night—all with a simple change to the configuration file.

The secret: Partitioning and dynamic repartitioning

InfoSphere Information Server parallel technology operates using a divide-and-conquer technique, splitting the largest integration jobs into subsets (partition parallelism) and flowing these subsets concurrently across all available processors (pipeline parallelism). This combination of pipeline and data partition parallelism delivers true linear scalability for InfoSphere DataStage. Performance increases proportionally to the number of processors—hardware is the only limiting factor to performance.

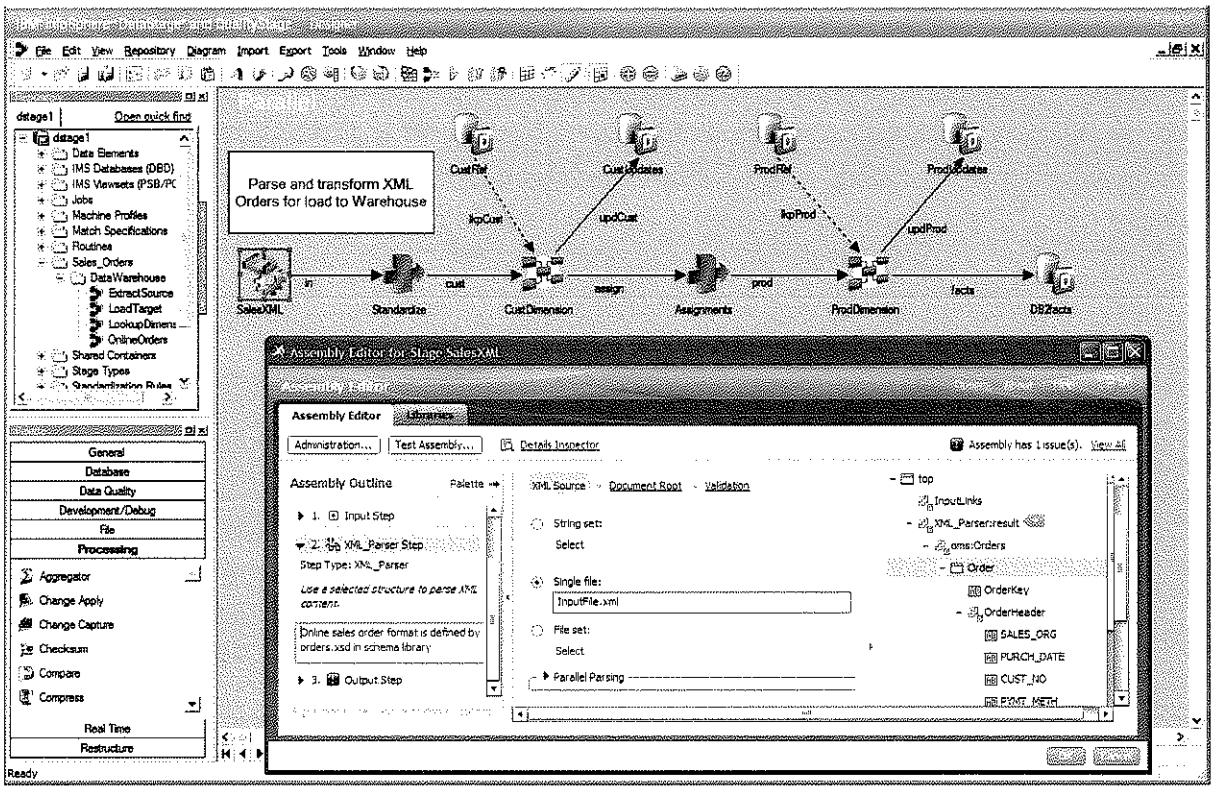

Figure 2: InfoSphere DataStage makes it easy to design enterprise data flows using a top-down, work-as-you-think metaphor

Consider a transformation based on customer last name, where the enriching needs to occur on zip code for householding purposes and on credit card number for loading into the data warehouse database parallel loader. With dynamic data repartitioning, data is repartitioned on the fly between processes—without landing the data to disk, a slow and costly step required by many other integration products.

Wide-ranging parallel support for SMP, MPP and grid deployments

IBM InfoSphere Information Server scales effortlessly from symmetric multiprocessor (SMP) systems and SMP clusters to massively parallel processing (MPP) servers with hundreds of processors. The same integration capability is available for grid deployment on low-cost servers. This wide-ranging support for parallel processing helps ensure critical enterprise information integration jobs will scale to keep pace with business requirements.

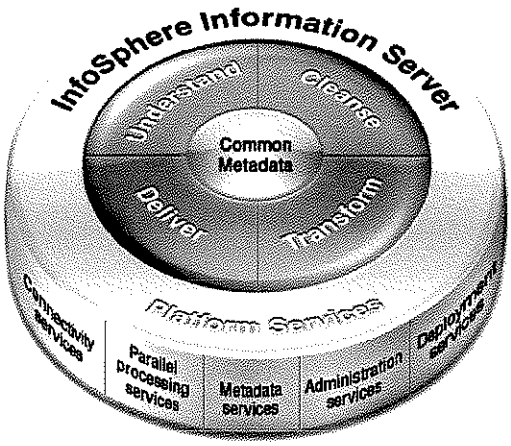

Figure 3: IBM InfoSphere Information Server

IBM InfoSphere DataStage is available on a wide variety of platforms. For a complete list, please visit ibm.com/ software/data/infosphere/datastage/requirements.html

About IBM InfoSphere Information Server

InfoSphere Information Server is a market-leading data integration platform that helps you understand, cleanse, transform and deliver trustworthy information to your critical business initiatives (see Figure 3). The platform provides everything you need to integrate heterogeneous information from across your systems, including capabilities for information governance, data quality, data transformation and data synchronization that help ensure information is consistently defined, accurately represented, reliably transformed and regularly updated. InfoSphere Information Server facilitates and promotes collaboration among business and IT professionals to make sure that strategic initiatives such as business analytics, master data management, application consolidation, migration and data warehousing projects use trusted information that is accurate, comprehensive, insightful and available in real time.

Additional details on the IBM InfoSphere Information Server portfolio can be found at ibm.com/software/data/integration/info_server

For more information

For more information about IBM InfoSphere DataStage, please visit ibm.com/software/data/infosphere/datastage

IBM Software Group
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
February 2011

IMD11783-USEN-02

IBM InfoSphere QualityStage

Investigate, cleanse and manage high-quality data to deliver better business results

Highlights

- Investigates data to identify the as-is level of data quality and determine quality issues
- Enforces standardization, matching and data survivorship rules for core business entities
- Matches customer, vendor, product and location data based on an organization's business rules, enabling an accurate, consistent view across the enterprise
- Processes global data on a massively scalable parallel platform for optimal performance
- Delivers reliable, high-quality data to critical enterprise initiatives to enable success in both batch architectures and Service Oriented Architectures (SOAs)

Get the most out of your organization's information assets

Organizations need to make sense of the mountains of information in their operational systems. A clear understanding of customers, products, partners and suppliers makes the difference between growing a business and failing to compete. Without clean, standardized and accurate data, that clear understanding cannot be achieved. In turn, poor data quality contaminates and undermines critical business initiatives, such as information governance, compliance and master data management.

Most organizations, however, have not yet evolved their processes, policies and infrastructure to enable high data quality. To address this need, organizations are increasingly adopting information governance, a quality-control discipline that adds new rigor to the process of defining common terminology and managing, using, improving and protecting information. Effective information governance can enhance the quality, availability and integrity of a company's data by fostering cross-organizational collaboration and structured policy making.

Data quality is a key part of information governance and is a core discipline within the IBM® InfoSphere™ Information Server platform, helping to enable the delivery of consistent, accurate, trusted information. With the InfoSphere Information Server data integration platform, IBM delivers a wide range of data quality capabilities, from data profiling, standardization and matching to active data quality monitoring.

Organizations focus on different aspects of data quality at different points in time; InfoSphere Information Server provides several capabilities that address data quality needs for each of those touch points.

IBM InfoSphere QualityStage™, part of the InfoSphere Information Server data integration platform, focuses on cleansing data: it enables enterprises to create and maintain accurate views of key entities, including customers, vendors, locations and products. Core InfoSphere QualityStage capabilities include data investigation, standardization, address verification, probabilistic matching, data survivorship and data enrichment. InfoSphere QualityStage may be deployed in transactional, operational or analytic environments, in batch or in real time.

IBM InfoSphere Information Analyzer, also part of the InfoSphere Information Server platform, delivers another set of data quality enhancement capabilities to help clients understand, analyze and monitor data. With integrated rules analysis, exception management and an intuitive user interface, clients can maintain high-quality data to help achieve business objectives. For more information about InfoSphere Information Analyzer, visit: ibm.com/software/data/integration/information-analyzer

InfoSphere QualityStage: A path to data quality benefits

InfoSphere QualityStage is designed to deliver high-quality data and help organizations reap related benefits, including:

- Improved return on investment (ROI)
- Reduced time, cost and risk of implementing enterprise resource planning (ERP), customer relationship management (CRM), data warehousing, business intelligence, master data management and other strategic IT initiatives
- Cleansed, consolidated customer and household views that support cross-selling and up-selling efforts
- Improved customer support and service, with the ability to identify the most profitable customers
- Consolidated views of suppliers, parts and products for more efficient analysis, procurement and inventory management
- Tight integration with the broader InfoSphere Information Server data integration platform, enabling a holistic approach that makes data quality a key component of data integration

Figures 1 and 2 show examples of how InfoSphere QualityStage can help standardize and transform data.

Standardization parts

Input file:

Operation Work Instruction
WING ASSY DRILL 4 HOLE USE 5J868A HEXBOLT 1/4 INCH
WING ASSEMBLY, USE 5J868-A HEX BOLT .25"- DRILL FOUR HOLES
USE 4 5J868A BOLTS (HEX .25) - DRILL HOLES FOR EACH ON WING ASSEM
RUDER, TAP 6 WHOLES, SECURE W/KL2301 RIVETS (10 CM)

Result file:

Assembly	Instruction	Qty	Type	Part	Size	Measure	SKU
WING	DRILL	4	HOLES	HEXBOLT	.25	INCH	5J868A
WING	DRILL	4	HOLES	HEXBOLT	.25	INCH	5J868A
WING	DRILL	4	HOLES	HEXBOLT	.25	INCH	5J868A
RUDDER	DRILL	6	HOLES	RIVET	10	CM	KL2301

Figure 1. An example of product parts standardization

Classic transformation: account to customer

Account view

Source	Legacy Key	Name	Address	Phone	Birth Date	Cust-ID
Life	70328574	John Smith Jr.	10 Main St Boston MA 02110	781-259-9945	02/05/1940	
Home	80328575	Mr. John Smith	10 Main St Unit 10 Boston MA 02111	617-259-9000		
Auto	90238495	J. Smyth	Main St Bostan Mass 02110	781-295-9945	02/05/1941	

Customer view ⬇ ***Link related records to create cross-reference IDs***

Source	Legacy Key	Name	Address	Phone	Birth Date	Cust-ID
Life	70328574	John Smith Jr.	10 Main St Boston MA 02110	781-259-9945	02/05/1940	0001
Home	80328575	Mr. John Smith	10 Main St Unit 10 Boston MA 02111	617-259-9000		0001
Auto	90238495	J. Smyth	Main St Bostan Mass 02110	781-295-9945	02/05/1941	0002

Customer profile ⬇ ***Create a customer profile with the best information from all sources***

Source	Legacy Key	Name	Address	Phone	Birth Date	Cust-ID
CP		Mr. John Smith Jr.	10 Main St Unit 10 Boston MA 02111	617-259-9000	02/05/1940	0001
CP		J. Smyth	Main St Bostan Mass 02110	781-295-9945	02/05/1941	0002

Figure 2. An example of data transformation

Organizations must ensure that strategic systems deliver accurate, comprehensive information that business users across the enterprise can trust. Through its easy-to-use, customizable user interface, InfoSphere QualityStage helps business users gain control over international names and addresses, and related data such as phone numbers, birth dates, email addresses and other descriptive comment fields. InfoSphere QualityStage uses highly accurate probabilistic matching algorithms to match data elements and discover relationships among them—in enterprise and Internet environments, and for batch and real-time processing.

From disparate-source data to high-quality information about core business entities

By performing character-level analysis, InfoSphere QualityStage helps uncover anomalous and buried data prior to transforming it for database loading or transaction processing. First, data from disparate sources is standardized into fixed fields, and business-driven rules assign the correct semantic meaning to the input data in order to facilitate matching.

Next, the powerful matching capabilities of InfoSphere QualityStage detect duplication and relationships in the data, despite anomalous, inconsistent or missing data values. A unique statistical matching engine assesses the probability that two or more sets of data values refer to the same business entity—providing extremely accurate match results. These capabilities are delivered in an integrated design environment with transformation technology, which helps embed data quality into critical information integration processes.

Once a match is confirmed, InfoSphere QualityStage constructs linking keys so users can complete a transaction or load a target system with true entity integrity, and can view related data as information. By using the data quality enhancement capabilities of InfoSphere Information Server during initial loads and system updates and during real-time data input, companies gain access to accurate, consistent, consolidated views of any individual or business entity and its relationships across the enterprise. This powerful matching and data cleansing occurs within a scalable parallel processing framework—providing world-class performance designed for the requirements of extended enterprises.

InfoSphere QualityStage features

- Easy-to-use, integrated and intuitive point-and-click user interface for specifying automated data quality processes: data investigation, standardization, matching and survivorship
- Enhanced Match Designer tool that enables easier setup and greater flexibility
- Global address cleansing, validation, certification (for specific localities) and geolocation
- Standardization and match reporting to gain greater insight into your data quality process and improve the quality of deployments
- Additional standardization rules to set coverage for Latin America, the Netherlands and India, as well as coverage for traditional Chinese and Japanese kana
- Rules-set acceleration for product data
- SOA for creation of data quality services for real-time deployment
- Powerful, accurate matching based on probabilistic matching technology and a full spectrum of fuzzy matching capabilities that are easy to set up and maintain
- Rigorous, scientific justification of matching, plus easy auditing and validation
- Efficient runtime and system resource usage and massive scalability
- Full integration with other InfoSphere Information Server capabilities including shared metadata, data monitoring, profiling and transformation

Data quality within a unified platform

As part of the InfoSphere Information Server platform, InfoSphere QualityStage delivers important data quality functions within the context of a complete information integration platform. It leverages unified installation, deployment and source control for rapid startup as well as unified data quality and transformation functions—in combination with IBM InfoSphere DataStage®—to help reduce the development time for integration projects and help ensure the quality of delivered data.

Active shared metadata across the InfoSphere Information Server platform helps simplify the collection and management of metadata over the entire integration spectrum. Metadata from InfoSphere Information Analyzer can be shared and leveraged within InfoSphere QualityStage, enabling superior collaboration. This level of integration can result in significant benefits, including greater confidence in the consistency of information and the ability to perform impact analysis across InfoSphere Information Server.

Data quality and information governance

Information governance can enhance the quality, availability and integrity of a company's data and foster cross-organizational collaboration and structured policy making. Applied consistently, it can help balance factional silos with organizational interest, directly impacting four of the most important objectives of any business: increasing revenue, lowering costs, reducing risks and increasing confidence in its data. Additionally, information governance allows an organization to monitor its information supply chain as an end-to-end system, helping to ensure that information is consistently defined and well understood; reliable and of high quality; managed throughout its life cycle; and protected wherever it lies.

InfoSphere Information Server, InfoSphere QualityStage and InfoSphere Information Analyzer deliver the data quality functionality organizations need to institute and enable information governance policies.

A forum for information governance

Now more than ever, data protection and management is a universal business concern. To help organizations better understand the emerging information governance field, IBM created a leadership forum in November 2004 for chief data officers and security, risk, compliance and privacy officers concerned about information governance issues.

Since then, the IBM Information Governance Council has steadily grown to comprise nearly 55 leading companies, universities and IBM Business Partners, including large financial institutions, telecommunications organizations, retailers and government agencies. The Council designed a framework to help businesses understand the core and supporting disciplines and the enablers of information governance. It also produced a maturity model to help assess information governance within an organization. To broaden involvement in the Council, IBM launched an online community to encourage organizations to participate, using crowdsourcing technology to further enhance the maturity model and information governance as a whole.

For more information on the IBM Information Governance Council, please visit: www.infogovcommunity.com

InfoSphere Information Server delivers value

Organizations face ongoing challenges with information: Where is it? How do I get it when I need it, in the form I need? Can I trust it? How do I control it? The hurdles continue to mount if businesses cannot ensure that they have access to authoritative, consistent, timely and complete information.

InfoSphere Information Server is a market-leading data integration platform that helps organizations derive more value from the complex, heterogeneous information spread across their systems. It enables an organization to integrate disparate data and deliver trusted information wherever and whenever needed, in line and in context, to specific people, applications and processes. It helps business and IT personnel collaborate to understand the meaning, structure and content of any type of information across any range of sources. It provides breakthrough productivity and performance for cleansing, transforming and moving this information consistently and securely throughout the enterprise, so it can be accessed and used in new ways to drive innovation, increase operational efficiency and help lower risk.

For more information

To learn more about InfoSphere QualityStage, including detailed hardware and software system requirements, please contact your IBM marketing representative or IBM Business Partner, or visit: ibm.com/software/data/infosphere/qualitystage

For more information about data quality solutions from IBM, visit: ibm.com/software/data/integration/capabilities/cleanse.html

To learn more about InfoSphere Information Server or other IBM information integration solutions, please contact your IBM marketing representative or IBM Business Partner, or visit: ibm.com/software/data/integration

IBM Software Group
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
February 2011

IMD11784-USEN-01

IN SUMMARY

Carahsoft and IBM appreciate the opportunity to offer this solution for DHHR's initiative.

Carahsoft has proposed a superior and cost-effective solution that fully complies with DHHR's requirements set forth in Solicitation #HHR13083. We understand the importance of your project goals, and we are confident you will benefit from this solution and our expertise.

Carahsoft looks forward to the opportunity to speak with you regarding the details of this proposal, as well as the opportunity to work with DHHR on this project.

CARAHSOFT'S RESPONSE TO THE

West Virginia Department of Health and Human Resources (WV DHHR)

REQUEST FOR PROPOSAL

Master Data Repository Management System

Volume 2: Price Response

SOLICITATION NO. HHR13083

Thursday
March 7, 2013

SOLUTION PROVIDED BY

IBM

CARAHSOFT TECHNOLOGY CORP.
12369 SUNRISE VALLEY DRIVE
RESTON, VA 20191

888.66.CARAH | WWW.CARAHSOFT.COM

carahsoft
technology corp

March 7, 2013

WVDHHR/MIS
One Davis Square
Suite 200
Charleston, WV 25301
Roberta.A.Wagner@wv.edu

Re: *Carahsoft's Response to the West Virginia Department of Health and Human Resources (WV DHRR)'s Request for Proposal for Master Data Repository System, Solicitation No. HHR13083*

Dear Ms. Wagner:

Carahsoft Technology Corp. appreciates the opportunity to respond to the West Virginia Department of Health and Human Resources (WV DHHR)'s Request for Proposal for a Master Data Repository System. Carahsoft is proposing IBM Initiate which fully meets DHHR's requirements for a Master Data Repository System.

Carahsoft has enclosed our response in two documents as requested; a technical volume titled Volume 1: Technical Response and a pricing volume titled Volume 2: Price Response. This document represents Volume 2 of Carahsoft's response.

As a top ranked GSA Schedule holder, Carahsoft has delivered best value solutions to our government clients for over eight years including the State of West Virginia.

Please feel free to contact me directly at 703.230.7466/rebecca.brockschmidt@carahsoft.com or Craig Abod at 703.871.8501/cpa@carahsoft.com with any questions or communications that will assist HHR in the evaluation of our response.

Thank you for your time and consideration.

Sincerely,

Rebecca Brockschmidt
Government Account Representative

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
*C08110509 703-871-8606
CARAHSOFT TECHNOLOGY CORP
12369 SUNRISE VALLEY DR
SUITE D-2
RESTON VA 20191

SHIP TO
HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED
02/01/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
	THE STATE OF WEST VIRGINIA AND ITS AGENCY THE DEPARTMENT OF HEALTH AND HUMAN RESOURCES (DHHR), OFFICE OF MANAGEMENT INFORMATION SERVICES (MIS) REQUEST A QUOTE TO PROVIDE A MASTER DATA REPOSITORY MANAGEMENT SYSTEM, CUSTOMIZABLE OFF THE SHELF PRODUCT PER THE ATTACHED INSTRUCTIONS TO BIDDERS AND SPECIFICATIONS. BID OPENING: MARCH 7, 2013 AT 1:30 PM					
0001	1	EA		099-00-01-001		
	MASTER DATA MANAGEMENT SOFTWARE (MDM HUB) INFORMATICA OR EQUAL PER THE ATTACHED SPECS.					
0002	3,560,000	EA		099-00-01-001		
	UNCONSOLIDATED CUSTOMER RECORDS					
0003	140,000	EA		099-00-01-001		
	UNCONSOLIDATED BUSINESS RECORDS					

SIGNATURE Melody Smith TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
*C08110509 703-871-8606
CARAHSOFT TECHNOLOGY CORP
12369 SUNRISE VALLEY DR
SUITE D-2
RESTON VA 20191

SHIP TO
HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED: 02/01/2013
BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0004	10	EA		099-00-01-001		
	DATA STEWARD INTERFACE					
0005	1	EA		099-00-01-001		
	REAL TIME EXTRACT TRANSFORM AND LOAD (ETL)					
0006	1	EA		099-00-01-001		
	DATA QUALITY					
0007	1	YR		099-00-01-001		
	YEAR ONE TOTAL ANNUAL SUPPORT WITH ABOVE REFERENCED PRODUCTS.					

SIGNATURE [signature] TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	4

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
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VENDOR
*C08110509 703-871-8606
CARAHSOFT TECHNOLOGY CORP
12369 SUNRISE VALLEY DR
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RESTON VA 20191

SHIP TO
HEALTH AND HUMAN RESOURCES

BPH ENVIRO HLTH SERVICES
350 CAPITOL STREET, ROOM 313
CHARLESTON, WV
25301-1757 304-558-8582

DATE PRINTED
02/01/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0012	3	EA		099-00-01-001		
	INSTRUCTOR LED TRAINING DAYS (UP TO 12 STUDENTS PER DAY).					
0013	80	HR		099-00-01-001		
	CONSULTING SERVICES (HOURS) FOR INSTALLATION AND CONFIGURATION OF THE MDM SOFTWARE FOR PRODUCTION AND TESTING ENVIRONMENTS.					
	****** THIS IS THE END OF RFQ HHR13083 ****** TOTAL:					

SIGNATURE Melony Ford TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Solicitation

NUMBER	PAGE
HHR13083	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE

SHIP TO
HEALTH AND HUMAN RESOURCES

WVDHHR/MIS
One Davis Square, Suite 200
Charleston WV 25301
Tel # 304-558-5906

DATE PRINTED
02/25/2013

BID OPENING DATE: 03/07/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO. 01		
				1. ADDENDUM ISSUED TO PROVIDE ANSWER TO QUESTIONS REGARDING THE ORIGINAL RFQ SUBMITTED. QUESTIONS AND ANSWERS ARE ATTACHED.		
				2. TO PROVIDE ADDENDUM ACKNOWLEDGEMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN THE DISQUALIFICATION OF YOUR BID.		
				********** END OF ADDENDUM NO. 01 **********		

SIGNATURE [signature] TELEPHONE 703.230.7413 DATE 03/05/2013

TITLE Director FEIN 52-2189693 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

TABLE OF CONTENTS

PRICE RESPONSE

The following pages contain Carahsoft and IBM's completed Exhibit A: Pricing Page.

REQUEST FOR QUOTATION

HHR13083 Master Data Management

EXHIBIT A

Quantity	Description	Unit Price	Amount
1[1] Each	MDM Hub	$	$ 406,082.50
3,560,000 Each	Unconsolidated Customer Records	$	$ Included with MDM Hub Pricing
140,000 Each	Unconsolidated Business Records	$	$ Included with MDM Hub Pricing
10 Each	Data Steward Interface	$	$ Included with MDM Hub Pricing for an Unlimited # of Users
1 Each	Real Time Extract Transform and Load (ETL)	$	$ 120,273.01
1 Each	Data Quality	$	$ Included with Real Time Extract Transform and Load
1 Year	Year 1 Total Annual Support with above referenced products	$	$ Included
1 Year	Year 2 Total Annual Support with above referenced products	$	$ 115,798.21
1 Year	Year 3 Total Annual Support with above referenced products	$	$ 127,378.03
1 Year	Year 4 Total Annual Support with above referenced products	$	$ 140,115.84
4 Years	Address Cleansing Subscription (yearly)	$	$ 33,388.81/per year
3 Each	Instructor Led Training Days (3 days training X 12 students per day)	$	$ 21,000.00

[1] The target server contains 1 quad core servers (i.e., each contains 4 cores). Sufficient licenses are required for this configuration. The initial installation is intended for 3 source systems. To share data to/from the MDM hub, 3 target systems is intended for initial installation.

REQUEST FOR QUOTATION

HHR13083 Master Data Management

80 Hours	Consulting Services (hours) for Installation and Configuration of the MDM software for production and testing environments	$	$28,000.00
Grand Total Amount			$ 992,036.40

Vendor Name: Carahsoft Technology Corp.

Vendor Address: 12369 Sunrise Valley Drive, Suite D2

Reston, VA 20191

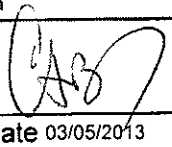
Remit to Address: WHVDHHR/MIS One Davis Square, Suite 200

Charleston, WV 25301

Phone #: 703.230.7413

Fax #: 703.871.8505

E-mail: cpa@Carahsoft.com

Signature: 

Date 03/05/2013

Award will be made to the vendor with the lowest grand total amount meeting specifications.

In Summary

Carahsoft and IBM appreciate the opportunity to offer this solution for HHR's initiative.

Carahsoft has proposed a superior and cost-effective solution that fully complies with HHR's requirements set forth in Solicitation #HHR13083. We understand the importance of your project goals, and we are confident you will benefit from this solution and our expertise.

Carahsoft looks forward to the opportunity to speak with you regarding the details of this proposal, as well as the opportunity to work with HHR on this project.