IBM®

*IBM Customer*

**IBM InfoSphere Information
Server Core + 4 Components
Install Package
Service Description**

**January 1, 2010**

**Information Management**

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# 1. Description of Services

Information Management Analytics & Optimization (IMAO) Software Services is pleased to submit this Service Description to IBM Customer (<IBM Cust>).  <IBM Cust> has requested the following services from IBM:

> ➢ IBM InfoSphere Information Server Core + 4 Componentss (IS Core + 4 Components) Install Package

This service provides the expert resources to install the IBM InfoSphere Information Server Core + 4 Componentss at your site.  It also provides hands-on assistance to address questions, recap key issues covered in formal training classes, and to confirm that <IBM Cust>'s systems and resources are ready to begin applying the knowledge gained in class to <IBM Cust>'s business needs and operational requirements.

The Delivery Consultant will help guide <IBM Cust> on proven strategies and procedures that have been employed at other IS installations.  The completed installation also verifies that the software is supportable by IBM's Product Support organization.

The scope of the IS Core + 4 Components Install Package is limited to the installation of the software and a base configuration of four IS components in one environment[1].

The IS Core + 4 Components Install Package will:

- Review of <IBM Cust>'s environment[2]
    - Update the Environment Prerequisite Checklist for the four product components
- Review the following four products components:
    - DataStage
    - QualityStage
    - Information Analyzer  (not to exceed access to one source, 5 tables, 10,000 records per table)
    - Information Services Director
- Perform Post-Installation Configuration for the four products components
    - Configure the following Components
        - DataStage – create two jobs
        - QualityStage – create one job
        - Information Analyzer – configure IA database, configure IA, one data source, five tables, 10,000 records per table
        - Information Services Director - create & deploy one service job, initiate consumer (utilizing free-ware)
    - Configure Information Server Authentication[3]
    - Configure Information Server Configuration file

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[1] The IBM Information Server Platform includes the installation of IS on one server implementing four product components and one client.

[2] Installation of prerequisite products (hardware and software) required for the IS Platform is <IBM Cust>'s responsibility.  Please see the **Hardware/Software Requirements for Information Server** document found on www.ibm.com/software/data/infosphere/info-server/overview/requirements.html

[3] LDAP configuration is additional effort.  Please contact your Services Sales Representative to discuss additional pricing.

- Configure DSENV file (as well as odbc.ini and uvodbc.ini files if using ODBC) – depends upon data sources

- Configure Authorization using Information Server Web Console *(add users or groups, specify authorization)*

- System Administration Handoff

- Deliver Updated System Configuration Document for the four products components

- Demonstrate the selected Product to the Project Team

- Project management and coordination to facilitate professional project delivery

This Install Package includes a set of tasks that <IBM Cust> must complete to facilitate product installation and rollout.  The actual duration of each task varies from customer to customer, based upon their knowledge of the products and the complexity of the anticipated IS environment.

The resources required for this project will include both the IBM and <IBM Cust> personnel that are required to install and configure the IS software.

At the completion of the IS Core + 4 Components Install Package for one environment, <IBM Cust>'s system and resources will be ready for maintenance support and for initiating the process to configure the system for <IBM Cust>'s specific business requirements.

This installation assumes that individuals knowledgeable on IS products will perform the tasks to identify the <IBM Cust> specific definition of the system after the completion of this project.  These definition services are outside the scope of deliverables of this Install Package[4].

Any change in the scope of work defined in this Service Description requested by <IBM Cust> may result in additional costs and must be documented in a Project Change Request (PCR).

## 2.    Required Product Training

As part of the delivery, <IBM Cust> is required to have at least one person complete (or have previously completed) the following IBM training.  The IBM education required for this installation is as follows:

- Course Code: DX880 – Information Server Essentials (ILO) (overview of all Information Server components - recommended)

**Or** attend the associated FlexLearning course for the component selected to be installed:

- FlexLearning:  0009 Overview of Information server (prerequisite for the subsequent FlexLearning courses)

- FlexLearning:  0010 Information Analyzer Overview

- FlexLearning:  0014 How to Analyze Data using Information Analyzer

- FlexLearning:  0011 Overview of QualityStage

- FlexLearning:  0005 Overview of DataStage

- FlexLearning:  0016 Information Services Director

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[4] Services to configure all site and user specific preferences are described in the Information Server Installation Services Offering may be delivered via a custom Statement of Work.

Following the delivery of this Package it is recommended for <IBM Cust> to attend product specific training:

- Course Code:  DX444 DataStage Essentials

- Course Code:  DX741 Quality Stage Essentials

- Course Code:  DX751 Information Analysis

- Course Code:  DX502 Information Services Director Essentials

- Course Code:  DX447 Information Server Administration

*Please note that IBM may offer an equivalent Instructor Led Online (ILO) or Self Paced Virtual Course (SPVC). Any of these courses will satisfy this installation package training requirement.*

The cost for these training courses is not included in this Install Package.  Please refer to the IBM Learning Services web site for detailed information regarding class cost, schedules, course descriptions, ordering options, registration instructions and relevant IBM web site locations.

While the training defined in this service provides a good foundation for administering the system in a pre-production status, <IBM Cust> should not consider this the total set of training that their resources will need to manage their production system.  The IS Education Team can assist <IBM Cust> in obtaining a recommended training plan specific to <IBM Cust>'s requirements.

*For individual training recommendations*, please reference the IMAO Training Paths.

*For training recommendations for your entire organization*, please request contact the IM Education Team at 1-800-IBM-TEACH.

IBM Learning Services web site:
    http://www-01.ibm.com/software/data/infosphere/services/learning.html

In the interests of quality education, IBM reserves the right to update training courses at any time.

# 3.    Resources

The <IBM Cust> Project Team will consist of the resources from the IMAO Account Team, the <IBM Cust> technical staff and, when applicable, an IBM Business Partner.  Examples of Project Team members are listed below.

## 3.1   IBM Team Resources

The IS Project Lead coordinates the appropriate IS resources as required.  The IMAO Team typically includes the following members:

- Solution Implementation Manager (SIM)

- Information Management Consultant (Delivery Consultant)

- Client Manager Representative (CMR)

- Services Sales Representative (Services Sales)

- Software Sales Representative(SSR)

- Technical Sales Specialist (TSS)

## 3.2    <IBM Cust> Team Resources

<IBM Cust> will need to identify internal personnel to fill the roles of the <IBM Cust> Project Team.  <IBM Cust> is responsible for selecting a Project Lead to share lead responsibilities with the SIM Project Lead.

Depending upon, the project the <IBM Cust> Project Team may include any of the following roles:

- Project Manager

- Information Server Administrator

- WebSphere® Application Server Administrator

- Infrastructure Architect

- Data Quality Architect

- System Analyst

- Business Analyst

- Database Administrator

- Software Administrator

# 4.    Role Definitions

<IBM Cust> will need to identify internal personnel to fill the roles as listed in Section 3, Resources.  The following outlines the general roles for each of these individuals.  Please note that additional resources may be required at various phases of the installation.  Likewise, not all of the individuals may necessarily be involved in this Install service.

| ROLE | RESPONSIBILITY |
|---|---|
| **Project & Architecture** | |
| Project Manager | • Responsible for process, deliverables, and overall project management; Accountable to business drivers.<br>• Coordinator of resource assignments.<br>• Develop and manage issues resolution and escalation procedures.<br>• Expert in project management. |
| Infrastructure Architect | • Responsible for designing the technical infrastructure to meet business and technical data integration processing requirements.<br>• Responsible for ensuring that the application design is optimized to meet response requirements. |
| Data Quality Architect | • Strategic and tactical responsibility for the data quality assessment and data cleansing activity for the data integration initiative.<br>• Identify strengths and opportunities for data improvement, and the data quality activities required to ensure the integrity of the data.<br>• Work with Business and IT teams to apply data assessment & data cleansing best practices.<br>• Develop auditing and balancing processes to meet business requirements.<br>• Skilled in data quality assessment and management techniques and methodology, and IBM$_®$ WebSphere$_®$ ProfileStage$^{TM}$, QualityStage$^{TM}$, technologies. |

| ROLE | RESPONSIBILITY |
|------|----------------|
| **Business & Data** | |
| Business Analyst or SME | • Expert on the business operations and sources of business information, possessing a thorough understanding of the business requirements for the group they represent.<br>• Responsible for interpreting end user's business requirements for the data integration initiative and for clarifying communication between the IT Project Team and the Business Users.<br>• Assist the IT Project Team in prioritization of requests for enhancements, definition of standard business metrics, terms and definitions, definition of validation criteria. |
| Systems Analyst or SME | • Has experience in and is knowledgeable about the relevant IT and User systems used in the business and the processes required to extract the data from these systems.<br>• Understands how the data is processed, flows through the systems, and is used by the business from a technical perspective. |
| **IT Administration** | |
| Software Administrator | • Installs, configures, and maintains the software technology for data integration initiatives.<br>• Manages version and upgrade releases and issues related to the software technology.<br>• Responsible for technology implementation that ensures expected performance delivery. |
| Database Administrator (DBA) | • Database commissioning: installation, configuration, deployment.<br>• Database management: user accounts, security, performance.<br>• Provide on-going support post-installation. |
| Information Server Administrator | • This individual will learn the administration functions necessary to oversee the IS system and will serve as the on-going administrator.  Attending the Information Server Essentials class is required and should be completed prior to the installation of the software.  This individual will work closely with the Delivery Consultant during installation and configuration of the IS server and clients<br>• Assign the suite and suite component roles to users. These roles determine which suite components the user can access and whether the user has component administrator or component user access in those suite components.<br>• Configure credential mappings for IBM® WebSphere® DataStage® and IBM® WebSphere® QualityStage $^{TM}$ users. |
| WebSphere Application Server Administrator | • This individual will work closely with the Delivery Consultant during the execution of the IS installation.  This resource will provide technical insight into the current <IBM Cust> environment, as required, for the installation phase. |

# 5.    Responsibilities

## 5.1    <IBM Cust> Responsibilities

In order to facilitate delivery, <IBM Cust> has the responsibility to provide the following:

a.)  Project Prerequisites

    – All prerequisites must be met before IBM can begin the installation of the product.

    – All hardware, software, and network configurations must meet IS requirements for system size and performance for the purchased software as defined in the Environment Prerequisite Checklist. This includes:

- ➢ Installation of the operating system
- ➢ Installation and/or application of appropriate levels of patches to meet IS minimum requirements
- ➢ Validation of
  - o the kernel parameters
  - o the User Group requirements for installation
  - o the Password requirements for installation
  - o File Systems and Mount Points Requirements
  - o Network Ports Enablement
- ➢ Configuration of Folder Permissions
- ➢ Assessment of Network Connectivity
- ➢ Configuration of WebSphere® Application Server (if previously installed)

    – Download the IS software to the appropriate servers prior to the resource arriving at <IBM Cust>'s facility.

    – Complete the *Environment Prerequisite Checklist*

    – Have attended the required training prior to the installation of any IS software.

b.) A Project Lead with sufficient authority to:

    – Represent <IBM Cust>'s interests

    – Serve as the focal point for all decisions and communications

    – Coordinate activities assigned to <IBM Cust> resources

    – Sign project-related documents

c.) Local system administrator(s) trained on the administration of the IS products previously installed.

d.) After the <IBM Cust> IS System Administrator has attended the proper training and has reinforced that training by observing the Delivery Consultant during the installation, he or she will be responsible for completing the following items.

    – Expansion of Users and/or Groups & Security

    – Creation of new projects with additional jobs & connections to data sources as needed for the component installed

e.) Adequate facilities for each Delivery Consultant including:

- cubicle, desk, telephone, and Internet access,

- remote access (e.g., VPN access),

- direct access to the keyboard.

f.) When performing remote work, <IBM Cust> will provide VPN access into <IBM Cust>'s network and remote access to a workstation in the network that:

- can connect to all required servers and

- is preloaded with all required connectivity tools appropriate to <IBM Cust>'s environment.

g.) Product Subscription and Support Agreement in place through IBM.

h.) <IBM Cust> will make available all <IBM Cust> personnel required for this project based on the agreed-upon project schedule. Any significant delays caused by <IBM Cust> personnel not being available or project prerequisites not being met may result in schedule delays, which can impact the project sufficiently to require a chargeable PCR addressing additional or extended IBM personnel requirements and additional costs.

## 5.2    IBM Responsibilities

a.)  Review Environment

- Review Environment Prerequisite Checklist (Pre-Installation & Configuration Guide)

b.)  Install IS software and 4 product components

- DataStage
- QualityStage
- Information Analyzer  (not to exceed access to one (1) data source)
- Information Services Director

c.)  Perform Post-Installation Configuration

- Configure each product component

    - DataStage – create two jobs

    - QualityStage – create one job

    - Information Analyzer – configure IA database, configure IA, profile one data source

    - Information Services Director - create & deploy one service job, initiate consumer (utilizing free-ware)

- Configure Information Server Authentication[5]

- Configure Information Server Configuration file

- Configure DSENV file (and odbc.ini and uvodbc.ini files if using ODBC)
  – depends upon data sources

- Configure Authorization using Information Server Web Console *(add initial users or groups, specify authorization)*

d.)  Perform System Administration Handoff for the Selected Component

- Transfer of Information
- Routine Maintenance
- Backup Methodology
- Problem Reporting

e.)  Demonstrate Product to the Project Team

f.)   Deliver System Configuration Document

g.)  Provide <IBM Cust> a completed Install Package Checklist for one environemnt.

# 6.    Assumptions & Limitations

## 6.1    Assumptions

a.)  Installation of IS software will not be in a clustered environment.  A chargeable PCR may be required to perform the installation in a clustered environment.

b.)  Configuration for Single Sign-on (SSO), Secured Socket Layer (SSL), or GRID is not included in this Install Package.  A chargeable PCR will be required to perform these additional efforts in each environment.

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[5] LDAP configuration is additional effort.  Please contact your Services Sales Representative to discuss additional pricing.

c.) Configuration for an LDAP solution is not included in this Install Package. A chargeable PCR will be required to perform this additional effort.

d.) Configuration for an SAP is not included in this Install Package.

e.) Additional resources and time for the development of "custom configurations" are not included in this service.

## 6.2 Service Limitations

The IS Core + 4 Components Install Package for one environment does not include repairs, corrections or troubleshooting of performance degradation, data corruption, errors and faults that are discovered during the process due to hardware failures, or non-qualified hardware or operating systems. Repairs, corrections or troubleshooting of such errors and faults will be <IBM Cust>'s responsibility; any IBM involvement will be charged on a Time and Materials (T&M) basis.

IMAO resources will be provided Monday through Friday from 8:00 a.m. to 5:00 p.m., excluding holidays and vacation time. Specific details regarding schedules will be mutually agreed-upon prior to the project start-date.

## 6.2.1 Travel & Living Expenses

This Package does **not** include domestic travel and living expenses incurred by IM resources traveling to <IBM Cust>'s site in order to fulfill IBM's tasks and responsibilities pertinent to delivering this service.

The Delivery Consultant may travel to <IBM Cust>'s site for two (2) visits for tasks associated with delivering this service. It is intended that status meetings will be held via conference calls. <IBM Cust> will be billed actual travel and living costs.

IBM will invoice <IBM Cust> for travel and living expenses and other reasonable expenses incurred in connection with the Package delivery. Amounts are due upon receipt of invoice and payable within 30 days. <IBM Cust> agrees to pay accordingly, including any late payment fee. <IBM Cust> does not have to pay any amount disputed in good faith while it is being investigated, but <IBM Cust> remains obligated to pay any amount not in dispute.

Additional on-site assistance requested by <IBM Cust> beyond the number of visits indicated above will be billable subject to the execution of a PCR. IBM also reserves the right to bill <IBM Cust> for any additional trips that are the direct result of <IBM Cust>'s failure to meet or perform its obligations outlined herein.

# 7. Project Tasks & Deliverables

The Project Team will perform the following tasks. Deliverables for each task are detailed within the task descriptions.

## 7.1 Task 1: Kickoff Meeting

The purpose of this meeting is to prepare both the <IBM Cust> team and the IMAO team for the IS Core + 4 Components Install Package delivery. Topics of discussion will include <IBM Cust>'s requirements, expectations, prerequisites, and schedules.

During this meeting the project team must prepare & plan for the installation of the following four product components:

- DataStage
- QualityStage

- Information Analyzer  (not to exceed access to one (1) data source)
- Information Services Director

### 7.1.1 Review Project Services Description

The SIM Project Lead will review the Install Package Service Description, the installation tasks, and roles and responsibilities with <IBM Cust>'s Project Team.

### 7.1.2 Define and Review Project Plan

Once selected, the joint <IBM Cust> and IBM Project Team customizes the sample project plan defining mutually agreed-upon dates for delivery (see Sample Project Plan).  Each task is assigned a resource and a time window based on the effort required to complete the task.  IBM strongly encourages the practice of joint task assignments as an excellent means of training and knowledge transfer for the team members.

### 7.1.3 Project Status

The SIM will track all issues and document their resolution in an Issues Log.  Any issue whose resolution requires a change will be documented in a PCR.

## 7.2 Task 2: Environment Review

This review will encompass the items indicated in the *Environment Prerequisite Checklist* that is delivered to <IBM Cust>.    Upon completion of <IBM Cust>'s portion of the document, the SIM will schedule the software installation.

Any questions arising from the completion of the *Environment Prerequisite Checklist* should be reviewed during the weekly status calls.

## 7.3 Task 3: Software Installation

The Delivery Consultant, with the assistance of <IBM Cust>'s Information Technology (IT) staff, will schedule the software installation for the four product components.  <IBM Cust>'s IT staff must review the release notes included on the software media, which provides the latest information regarding operating system software release levels and patches required for software installation.

A member of <IBM Cust>'s IT staff must have attended the prerequisite training, as defined in 2. Required Product Training, prior to this step to facilitate appropriate system configuration choices and ease support transition to <IBM Cust>.

With the assistance of <IBM Cust>'s IS & WebSphere Administrators, the Delivery Consultant will install the IS software implementing the four product components on one environment:

- DataStage
- QualityStage
- Information Analyzer
- Information Services Director

### 7.3.1 Install InfoSphere Details for each Product Component

The Delivery Consultant will work with the <IBM Cust>'s appropriate Administrator to implement the four product components.  This will include collecting additional component requirements as part of the software installation.

### 7.3.2 Install InfoSphere Server Layers

The effort begins by installing the Server layers for the component selected.  These tiers work together to provide services, job execution, and metadata and other storage,

- Repository layer - Database that stores the shared metadata, data, and configuration for IBM Information Server and the product components

- Services layer - Common and product-specific services for IBM Information Server along with IBM WebSphere® Application Server (application server)

- Engine layer - Runtime engine that runs jobs and other tasks for product components that require the engine

### 7.3.3 Install InfoSphere Client Layer

Once the server layers are implemented, this is followed by the client layer.

- Client Layer - Product component clients that are not Web-based and that are used for development and administration in IBM Information Server

### 7.3.4 Verify Installation

The installation is verified by reviewing the version.xml file which will validate that both the server and client layers were installed correctly. Additional verification will be carried out as part of the post-installation configuration tasks. The type of verification depends on the type of component that was selected.

## 7.4 Task 4: Perform Post-Installation Configuration

The post-installation configuration will take place for each of the four product components.

### 7.4.1 Component Configuration

#### 7.4.1.1 *DataStage*

Create two DataStage jobs; the first one is to ensure the DataStage Engine is working properly, and the second is to ensure the compiler is working properly.

#### 7.4.1.2 *QualityStage*

Create one QualityStage job that standardizes customer names and validate that QualityStage is working properly.

#### 7.4.1.3 *Information Analyzer*

Configure IA database, configure IA, profile one data source, maximum 10,000 records and run a column analysis.

#### 7.4.1.4  *Information Services Director*

Create & deploy one (1) service job, initiate consumer (utilizing freeware). This job will accept first name and last name from the services consumer and will return a full name.

### 7.4.2  Finalize the Configuration

After the component is configured, the Delivery Consultant will finalize the configuration by completing the following items:

- Configure Information Server Authentication[6]

- Configure Information Server Configuration file

- Configure DSENV file (and odbc.ini and uvodbc.ini files if using ODBC)
  – depends upon data sources

- Configure Authorization using Information Server Web Console *(add users or groups, specify authorization)*

## 7.5    Task 5: System Administration Handoff

### 7.5.1  Transfer of Information

The Delivery Consultant will review all four IS products components with the <IBM Cust> System Administrator to better prepare <IBM Cust> for further expansion of the system.

### 7.5.2  Routine Maintenance

Routine maintenance involves reviewing the daily duties of <IBM Cust>'s IS System Administrator with respect to maintenance of the IS system.  These are tasks that should be performed daily and will be specific to <IBM Cust>'s usage of the IS system and its configuration.  IBM recommends that the IS System Administrator develop a schedule of "housekeeping" procedures and tasks to be performed.  Some examples include:

- Performance monitoring

- Monitoring  database log file

- Initiating IS system backup preparation

- Checking the event log

- Checking IS system administration log

- Checking the amount of free space for the projects, datasets, and databases

### 7.5.3  Review Backup Methodologies

The Delivery Consultant will review possible backup strategies with the <IBM Cust> System Administrator. This Install Package does not provide for the Delivery Consultant to analyze <IBM Cust>'s backup objectives nor does it develop the plan to meet those objectives.

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### 7.5.4  Problem Reporting

Before calling IBM Customer Support, full documentation of the problem at hand always expedites resolution and helps maintain internal system up-time records.  The Delivery Consultant will review troubleshooting and problem reporting procedures and provide a trouble report template to <IBM Cust>.  Over time the <IBM Cust> System Administrator will learn to determine the nature of problems that arise and will be able to resolve or report them as necessary.

For integrity issues, IBM requests that <IBM Cust> contact IBM Customer Support by using the IBM toll free Customer Service telephone number (1-800-429-7378).

## 7.6  Task 6: Demonstrate System to <IBM Cust> Project Team

After the initial samples have been tested, IBM will demonstrate the IS system to the <IBM Cust> Project Team.  The demonstration is an opportunity to share ideas on how to best configure the system post-installation, gather immediate feedback on issues that may have been overlooked, and solicit suggestions for system improvements.  Other uses for the system are often identified in such meetings, giving impetus for follow-on projects.

## 7.7  Task 7: System Configuration Document

As <IBM Cust> tests the system, the Delivery Consultant will provide <IBM Cust> the updated System Configuration Document, which includes the IS system configuration data as well as the installed IS software versions and patches.  This document represents a starting point for on-going maintenance and modification of the system.

## 7.8  Task 8: Project Completion Checklist

Upon demonstration of the product the Delivery Consultant will deliver to <IBM Cust> a completed Install Checklist which constitutes completion of this project.  Please refer to *IBM InfoSphere Information Server Core + 4 Components Install Package Completion Checklist*.

If issues arise after delivery of the Project Completion Checklist, <IBM Cust> should contact IBM Customer Support by using the IBM toll free Customer Service telephone number (1-800-429-7378).