

# USACE Enterprise Data Warehouse

Budget year: FY2010  
Agency: 202

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## Exhibit 300: Capital Asset Plan and Business Case Summary Part I: Summary Information And Justification

### Section A: Overview

1. Date of submission: **Sep 8, 2008**
2. Agency: **202**
3. Bureau: **00**
4. Name of this Capital Asset: **USACE Enterprise Data Warehouse**
5. Unique Project (Investment) Identifier: **202-00-02-00-01-1017-00**
6. What kind of investment will this be in FY2010? **Mixed Life Cycle**
7. What was the first budget year this investment was submitted to OMB? **FY2010**
8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap: **The Enterprise Data Warehouse (EDW) project was launched as an initiative under the larger Knowledge Management Environment (KME) program in the Fall of 2006. The EDW project is one of the 16 Knowledge Management Initiatives (KMI's) that are currently recognized as components of the KME program. Currently the EDW is in the process of transitioning from the KME umbrella and becoming an independent program. As such this is the first year that an OMB-300 will be submitted for the EDW. The EDW will supplement and replace multiple legacy AIS databases that provide only summary roll up data to USACE executive management. The EDW will provide USACE leadership with an improved executive level reporting capability, producing more comprehensive data allowing for more informed executive decision making. Implementation of the EDW will provide a single repository of summary level data accessible throughout the USACE organization. The adoption of a centralized IT solution eliminates multiple Oracle databases that are currently used to house historical information for Corps AIS , and eliminates the need for additional databases to support emergent customer requirements to establish new views of existing data based upon business lines. In short, the EDW improves the Corps ability to monitor and report on the planning, budgeting and execution of projects across the organization, offering the USACE community increased functionality at a lower cost through the adoption of Enterprise IT solutions. The implementation of the EDW will support the overall organizational goals outlined in the**

**Commanding Generals Campaign Plan, as well as the more specific initiatives contained in the CIO s 700 Day Plan. The EDW is a multi-phased project in which phases can be overlapped and accelerated based upon the availability of funds. To date four phases have been planned, three have been initiated, and two have been completed. The EDW Phases can be broken out as follows; Phase I: Proof of Concept: Demonstrate the viability of the technology and the value of the aggregated data. Phase II: Environment: Purchase, configuration, certification and deployment of selected technologies. Phase III: RM Project: Deploy first custom reporting solution Phase Iv: Growth: Deployment of EDW technologies across the Corps**

9. Did the Agency's Executive/Investment Committee approve this request? **yes**
- a. If "yes," what was the date of this approval? **Jul 1, 2006**
10. Did the Project Manager review this Exhibit? **yes**
11. Contact information of Program/Project Manager?
- |              |                   |
|--------------|-------------------|
| Name         | <b>[Redacted]</b> |
| Phone Number | <b>[Redacted]</b> |
| E-mail       | <b>[Redacted]</b> |
- a. What is the current FAC-P/PM (for civilian agencies) or DAWIA (for defense agencies) certification level of the program/project manager? **Waiver Issued**
- b. When was the Program/Project Manager Assigned? **Jul 1, 2007**
- c. What date did the Program/Project Manager receive the FAC-P/PM certification? If the certification has not been issued, what is the anticipated date for certification? **Sep 5, 2008**
12. Has the agency developed and/or promoted cost effective, energy efficient and environmentally sustainable techniques or practices for this project. **yes**
- a. Will this investment include electronic assets (including computers)? **yes**
- b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only) **[Not answered]**
1. If "yes," is an ESPC or UESC being used to help fund this investment? **[Not answered]**
2. If "yes," will this investment meet sustainable design principles? **[Not answered]**
3. If "yes," is it designed to be 30% more energy efficient than relevant code? **[Not answered]**
13. Does this investment directly support one of the PMA initiatives? **yes**
- Budget Performance Integration**
- a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? **The EDW is focused on improving the Corps ability to assess budget and schedule performance and make more informed decisions. The integration of data from previously disconnected sources allows more accurate performance assessments and ensures resources are allocated to the most successful projects. EDW tools automate the aggregation of data from multiple systems reducing manual efforts and giving employees more time to investigate and rectify performance issues.**
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit [www.whitehouse.gov/omb/part](http://www.whitehouse.gov/omb/part).) **no**
- a. If "yes," does this investment address a weakness found during a PART review? **[Not answered]**
- b. If "yes," what is the name of the PARTed program? **[Not answered]**
- c. If "yes," what rating did the PART receive? **[Not answered]**
15. Is this investment for information technology? **yes**

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance) **Level 2**
17. In addition to the answer in 11(a), what project management qualifications does the Project Manager have? (per CIO Council PM Guidance) **(1) Project manager has been validated as qualified for this investment**
18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4-FY 2008 agency high risk report (per OMB Memorandum M-05-23)? **yes**
19. Is this a financial management system? **no**
- a. If "yes," does this investment address a FFMIA compliance area? **[Not answered]**
1. If "yes," which compliance area: **[Not answered]**
2. If "no," what does it address? **[Not answered]**
- b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52 **[Not answered]**
20. What is the percentage breakout for the total FY2010 funding request for the following?
- Hardware **0**
- Software **10**
- Services **90**
- Other **[Not answered]**
21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities? **n/a**
22. Contact information of individual responsible for privacy related questions:
- Name **[Redacted]**
- Phone Number **[Redacted]**
- Title **Privacy Act Officer**
- E-mail **[Redacted]**
23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? **no**
24. Does this investment directly support one of the GAO High Risk Areas? **yes**

**Section B: Summary of Spending**

1.

<b>Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS)</b>									
<i>(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)</i>									
	<b>PY-1 and earlier</b>	<b>PY 2008</b>	<b>CY 2009</b>	<b>BY 2010</b>	<b>BY+1 2011</b>	<b>BY+2 2012</b>	<b>BY+3 2013</b>	<b>BY+4 and beyond</b>	<b>Total</b>
Planning:	0	0	0	0	[*]	[*]	[*]	[*]	[*]
Acquisition:	0	0	0	0	[*]	[*]	[*]	[*]	[*]
Subtotal Planning & Acquisition:	0	0	0	0	[*]	[*]	[*]	[*]	[*]
Operations & Maintenance:	0	3.1	2.5	2.3	[*]	[*]	[*]	[*]	[*]
TOTAL:	0	3.1	2.5	2.3	[*]	[*]	[*]	[*]	[*]
<b>Government FTE Costs should not be included in the amounts provided above.</b>									

Government FTE Costs	0	0	0	0.3	[*]	[*]	[*]	[*]	[*]
Number of FTE represented by Costs:	0	0	0	1	[*]	[*]	[*]	[*]	[*]

2. Will this project require the agency to hire additional FTE's? **no**
  - a. If "yes", How many and in what year? [Not answered]
  
3. If the summary of spending has changed from the FY2009 President's budget request, briefly explain those changes: **The USACE Enterprise Data Warehouse was not submitted as a separate initiative in the Presidents FY 2009 Budget Request. At that point the EDW was still covered under the larger Knowledge Management Environment (KME). The KME program is a project incubator tasked with researching and developing promising IT initiatives in order to best support the CIO's goals for transformation. As initiatives mature they are spun off as independent programs. As the EDW is on the brink of deployment this is the first year that an OMB 300 has been submitted.**

**Section C: Acquisition/Contract Strategy**

1.

<b>Contracts/Task Orders Table:</b>	
<b>Contract or Task Order Number</b>	GS-06F-0387Z
<b>Type of Contract/Task Order (In accordance with FAR Part 16)</b>	Firm Fixed Price
<b>Has the contract been awarded</b>	yes
<b>If so what is the date of the award? If not, what is the planned award date?</b>	Sep 26, 2006
<b>Start date of Contract/Task Order</b>	Sep 26, 2006
<b>End date of Contract/Task Order</b>	Nov 30, 2009
<b>Total Value of Contract/ Task Order (\$M)</b>	2.1
<b>Is this an Interagency Acquisition?</b>	no
<b>Is it performance based?</b>	no
<b>Competitively awarded?</b>	no
<b>What, if any, alternative financing option is being used?</b>	NA
<b>Is EVM in the contract?</b>	no
<b>Does the contract include the required security &amp; privacy clauses?</b>	yes
<b>Name of CO</b>	[Redacted]
<b>CO Contact information (phone/email)</b>	[Redacted]
<b>Contracting Officer FAC-C or DAWIA Certification Level</b>	3
<b>If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition?</b>	[Not answered]

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why: **The contract does not specifically require the performance of Earned Value Management reporting however the Program Manager has made EVM reporting a part of the monthly project reports that must be submitted with invoices each month.**
  
3. Do the contracts ensure Section 508 compliance? **yes**
  - a. Explain why not or how this is being done? **The EDW user community will interact with the Business Objects XI reporting tools. This will include Dashboards, Web Intelligence Reports and Crystal reports all of which are 508 complaint tools.**
  
4. Is there an acquisition plan which reflects the requirements of FAR Subpart 7.1 and has been approved in accordance with agency requirements? **no**
  - a. If "yes," what is the date? [Not answered]

1. Is it Current? [Not answered]

b. If "no," will an acquisition plan be developed? **yes**

1. If "no," briefly explain why: [Not answered]

**Section D: Performance Information**

<b>Performance Information Table</b>							
<b>Fiscal Year</b>	<b>Strategic Goal(s) Supported</b>	<b>Measurement Area</b>	<b>Measurement Grouping</b>	<b>Measurement Indicator</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual Results</b>
2009	Decrease support and maintenance costs for existing applications	Technology	Support Costs	The number of system interconnections supported by P2 & CEFMS	Legacy AIS systems CEFMS & P2 support hundreds of system interconnections which must be maintained and managed	CEFMS and P2 stop supporting new interconnection requests and sunset existing connections	
2009	Reduce Metric Development and Aggregation Timeline:	Customer Results	Budget and Performance Integration	Speed of delivery of Resource Management (RM) performance metrics	Developing National RM performance metrics manually requires 4 weeks.	Provide National (RM) community with metrics supporting the comparison of budget and performance data in a near real time environment.	
2009	Develop capability to more carefully monitor resource expenditures as measured against project completion.	Processes and Activities	Budget and Performance Integration	Number of previously unavailable performance management analytic tools available to USACE business managers	No automated performance management metrics exist	Provide 10 automated performance management analytic tools to USACE customers	
2009	Reduce training costs associated with report development	Mission and Business Results	Customer Training	Training expenditures	The number of enterprise reporting systems supported by USACE	Reduce the amount of reporting systems supported by USACE by 50%	
2008	Develop capability to more carefully monitor resource expenditures as measured against	Technology	Management Improvement	The number of Business Intelligence (BI) Tools available to USACE community.	At the start of FY 2008 there were no BI tools available within the Corps	Deploy three BI tools to USACE community	The signing of the Authority to Operate (ATO) on August 28, 2008 marked the formal acceptance of the baseline BI capability at USACE. Web Intelligence,

	project completion.						Crystal Reports and Dashboard Manager are now available across the enterprise.
2008	Decrease the amount of time required to develop budget and performance reports.	Mission and Business Results	Budget and Performance Integration	The amount of time required to query all instances of CEFMS and develop an aggregated report detailing expenditures in support of IT investments	Development of 2006 reporting required two weeks of data aggregation and review	Provide FY 2007 quarterly data within one week of request.	EDW Pilot program was not completed in time to support aggregation of Q1 and Q2 data. Pilot program successfully supported 3Q reporting in less than one week.
2010	Develop capability to more carefully monitor resource expenditures as measured against project completion.	Mission and Business Results	Budget and Performance Integration	Number of previously unavailable performance management analytic tools available to USACE business managers	No automated performance management metrics exist in FY08. Plan to deploy 10 during FY2009.	Provide 50 automated performance management analytic tools to USACE customers	
2010	Decrease support and maintenance costs for existing applications	Technology	Budget and Performance Integration	The number of external system interconnections supported by P2, CEFMS , OMNI-LPMS	Number of system interconnections to both internal and external partners.	Corps legacy systems support hundreds of system interconnections. Eliminate external interfaces between transactional systems included in the EDW and external partners	
2010	Reduce training costs associated with report development	Processes and Activities	Budget and Performance Integration	Training expenditures	The number of enterprise reporting systems supported by USACE	Reduce the amount of reporting systems supported by USACE by 100%. By BY 2010 it is planned that the EDW will be the sole enterprise reporting system supporting USACE activities.	[Not answered]
2010	Increase the availability of timely performance data to support executive decisions at the Corps	Mission and Business Results	Budget and Performance Integration	Number of districts / centers utilizing performance management dashboards.	Developing District & Division RM performance metrics manually requires 4 weeks.	Deploy tailored RM metric reporting tools to 50% of districts within USACE	

2008	Improving Data Accessibility across the Enterprise to allow creation of reports that aggregate data across system boundaries	Processes and Activities	Budget and Performance Integration	Creation and maintenance of a targeting metric detailing systems with highly shared data for integration into the EDW	Initial systems targeted for inclusion in EDW were CEFMS & P2.	Target the next ten systems for inclusion in the EDW and develop integration plans detailing how they will become part of the EDW.	Systems have been analyzed and a targeting metric is now maintained. Integration plans have not yet been developed for top ten candidates.
2008	Automate data aggregation to support regional financial management goals	Customer Results	Budget and Performance Integration	The number of Extract Transform and Load (ETL) routines developed to support automated data aggregation	No ETL routines existed at the start of the FY	Develop 300 or more ETL routines to support Resource Management reporting requirements	Over 326 individual ETL routines have been produced and accepted to date. The EDW is now automatically populated with a wealth of financial data to support Regional resource management processes.

### Section E: Security and Privacy

1. Have the IT security costs for the system(s) been identified and integrated into the overall costs of the investment?: **yes**
  - a. If "yes," provide the "Percentage IT Security" for the budget year: **3**
2. Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment?. **yes**

### 3. Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization - Security Table(s):

Name of System	Agency/ or Contractor Operated System?	Planned Operational Date	Date of Planned certification and accreditation (C&A) update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)
<i>There are no Systems in Planning.</i>			

### 4. Operational Systems - Security Table:

Name of System	Agency/ or Contractor Operated System?	NIST FIPS 199 Risk Impact level	Has C&A been Completed, using NIST 800-37?	Date Completed: C&A	What standards were used for the Security Controls tests?	Date Completed: Security Control Testing	Date the contingency plan tested
Enterprise Data Warehouse	Contractor and Government	Low	yes	Jul 15, 2008	Other	Jun 6, 2008	Aug 8, 2008

5. Have any weaknesses, not yet remediated, related to any of the systems part of or supporting this

investment been identified by the agency or IG? **no**

a. If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process? [Not answered]

6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? **no**

a. If "yes," specify the amount, provide a general description of the weakness, and explain how the funding request will remediate the weakness. [Not answered]

7. How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above? **Contractors are not allowed to modify the Production or COOP environments for the EDW. When system modifications are required contractor personnel inform government staff and request modifications in accordance with the MOA.**

**8. Planning & Operational Systems - Privacy Table:**

Name of System	Is this a new system?	Is there a Privacy Impact Assessment (PIA) that covers this system?	Internet Link or Explanation	Is a System of Records Notice (SORN) required for this system?	Internet Link or Explanation
Enterprise Data Warehouse	yes	yes	EDW collects no PIA data on members of the public for that reason the PIA conducted is for USACE internal use only. It is not submitted to Army G6/CIO.	no	The EDW does not track data on an individual basis. It is a management decision making tool.

**Section F: Enterprise Architecture (EA)**

1. Is this investment included in your agency's target enterprise architecture? **yes**

a. If "no," please explain why? [Not answered]

2. Is this investment included in the agency's EA Transition Strategy? **yes**

a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. **USACE Enterprise Data Warehouse**

b. If "no," please explain why? [Not answered]

3. Is this investment identified in a completed and approved segment architecture? **yes**

a. If "yes," provide the six digit code corresponding to the agency segment architecture. The segment architecture codes are maintained by the agency Chief Architect. For detailed guidance regarding segment architecture codes, please refer to <http://www.egov.gov>. **100-000**

**4. Service Component Reference Model (SRM) Table :**

Agency Component Name	Agency Component Description	FEA SRM Service Type	FEA SRM Component	Service Component Reused		Internal or External Reuse?	BY Funding Percentage
				Component Name	UPI		
Tagging and Aggregation	Support the identification of specific content within a larger set of content for collection and summarization	Content Management	Tagging and Aggregation	[Not answered]	[Not answered]	No Reuse	5
Library / Storage	Support document and data warehousing and archiving	Document Management	Library / Storage	[Not answered]	[Not answered]	No Reuse	5
	Allow access to data and						



Information Retrieval	information for use by an organization and its stakeholders	Knowledge Management	Information Retrieval	[Not answered]	[Not answered]	No Reuse	5
Information Mapping / Taxonomy	Support the creation and maintenance of relationships between data entities, naming standards and categorization	Knowledge Management	Information Mapping / Taxonomy	[Not answered]	[Not answered]	No Reuse	5
Information Sharing	Support the use of documents and data in a multi-user environment for use by an organization and its stakeholders	Knowledge Management	Information Sharing	[Not answered]	[Not answered]	No Reuse	10
Categorization	Allow classification of data and information into specific layers or types to support an organization	Knowledge Management	Categorization	[Not answered]	[Not answered]	No Reuse	5
Knowledge Distribution and Delivery	Support the transfer of knowledge to the end customer.	Knowledge Management	Knowledge Distribution and Delivery	[Not answered]	[Not answered]	No Reuse	5
Data Mining	Provide for the efficient discovery of non-obvious, valuable patterns and relationships within a large collection of data	Knowledge Discovery	Data Mining	[Not answered]	[Not answered]	No Reuse	5
Decision Support and Planning	Support the analysis of information and predict the impact of decisions before they are made	Business Intelligence	Decision Support and Planning	[Not answered]	[Not answered]	No Reuse	5
Ad Hoc	Support the use of dynamic reports on an as needed basis	Reporting	Ad Hoc	[Not answered]	[Not answered]	No Reuse	5
Standardized / Canned	Support the use of pre-conceived or pre-written reports	Reporting	Standardized / Canned	[Not answered]	[Not answered]	No Reuse	5
OLAP	Support the analysis of information that has been summarized into multidimensional views and hierarchies	Reporting	OLAP	[Not answered]	[Not answered]	No Reuse	5
Data Mart	Support a subset of a data warehouse for a single department or function within an organization	Data Management	Data Mart	[Not answered]	[Not answered]	No Reuse	5
Data Warehouse	Support the archiving and storage of large volumes of data	Data Management	Data Warehouse	[Not answered]	[Not answered]	No Reuse	5
Extraction and Transformation	Support the manipulation and change of data	Data Management	Extraction and Transformation	[Not answered]	[Not answered]	No Reuse	5
Loading and Archiving	Support the population of a data source with external data	Data Management	Loading and Archiving	[Not answered]	[Not answered]	No Reuse	5
Legacy Integration	Support the communication between newer generation hardware/software applications and the previous, major generation of hardware/software applications	Development and Integration	Legacy Integration	[Not answered]	[Not answered]	No Reuse	5
Enterprise	Support the redesigning of disparate information	Development	Enterprise				

Application Integration	systems into one system that uses a common set of data structures and rules	and Integration	Application Integration	[Not answered]	[Not answered]	No Reuse	5
Data Integration	Support the organization of data from separate data sources into a single source using middleware or application integration as well as the modification of system data models to capture new information within a single system	Development and Integration	Data Integration	[Not answered]	[Not answered]	No Reuse	5

### 5. Technical Reference Model (TRM) Table:

FEA SRM Component	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification
Tagging and Aggregation	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Tagging and Aggregation	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Tagging and Aggregation	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Tagging and Aggregation	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Tagging and Aggregation	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Tagging and Aggregation	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Tagging and Aggregation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Tagging and Aggregation	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Tagging and Aggregation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Tagging and Aggregation	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Tagging and Aggregation	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC
Library / Storage	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Library / Storage	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Library / Storage	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Library / Storage	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris Neteeza (8150 / 8250 / 10200)
Library / Storage	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Library / Storage	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150

				Database (COOP)
Library / Storage	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Library / Storage	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Library / Storage	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Library / Storage	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Library / Storage	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Information Mapping / Taxonomy	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Information Mapping / Taxonomy	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Information Mapping / Taxonomy	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Information Mapping / Taxonomy	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris Neteeza (8150 / 8250 / 10200)
Information Mapping / Taxonomy	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Information Mapping / Taxonomy	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Information Mapping / Taxonomy	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Information Mapping / Taxonomy	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Information Mapping / Taxonomy	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Information Mapping / Taxonomy	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Information Mapping / Taxonomy	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Information Sharing	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Information Sharing	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Information Sharing	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Information Sharing	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Information Sharing	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
Information	Service Platform	Delivery Servers	Application	Neteeza Performance Server v4.0 Business

Sharing	and Infrastructure		Servers	Objects XI R2
Information Sharing	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Information Sharing	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Information Sharing	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Categorization	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Categorization	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Categorization	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Categorization	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Categorization	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
Categorization	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Categorization	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Categorization	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Categorization	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Knowledge Distribution and	Service Access	Delivery	Intranet	USACE Network

Delivery	and Delivery	Channels		
Knowledge Distribution and Delivery	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Netezza (8150 / 8250 / 10200)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Netezza 8250 Database (Development) Netezza 8150 Database (COOP)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Knowledge Distribution and Delivery	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Knowledge Distribution and Delivery	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Data Mining	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Data Mining	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Data Mining	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Data Mining	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Data Mining	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Netezza (8150 / 8250 / 10200)
Data Mining	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Data Mining	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Netezza 8250 Database (Development) Netezza 8150 Database (COOP)
Data Mining	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Data Mining	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Data Mining	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Data Mining	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Data Mining	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2

Data Mining	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Decision Support and Planning	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Decision Support and Planning	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Decision Support and Planning	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Decision Support and Planning	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Decision Support and Planning	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
Decision Support and Planning	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Decision Support and Planning	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Decision Support and Planning	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Decision Support and Planning	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Decision Support and Planning	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Decision Support and Planning	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Decision Support and Planning	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Decision Support and Planning	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Ad Hoc	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Ad Hoc	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Ad Hoc	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Ad Hoc	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Ad Hoc	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
Ad Hoc	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Ad Hoc	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Ad Hoc	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Ad Hoc	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Ad Hoc	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
	Service Platform	Hardware /	Certificates /	

Ad Hoc	and Infrastructure	Infrastructure	Digital Signatures	Secure Sockets Layer (SSL) Firewall
Ad Hoc	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Ad Hoc	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Standardized / Canned	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
Standardized / Canned	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
Standardized / Canned	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Standardized / Canned	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
Standardized / Canned	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
Standardized / Canned	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
Standardized / Canned	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Standardized / Canned	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
Standardized / Canned	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Standardized / Canned	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Standardized / Canned	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
Standardized / Canned	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
Standardized / Canned	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
OLAP	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 443 (SSL) Port 80 (HTTP - IIS) Port 8080 (HTTD - Tomcat) Port 3389 (HTTD)
OLAP	Service Access and Delivery	Access Channels	Web Browser	Microsoft IE 6.x or greater
OLAP	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
OLAP	Service Access and Delivery	Service Transport	Service Transport	HTTPS TCP/IP
OLAP	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	MS Windows Server 2003 Neteeza (8150 / 8250 / 10200)
OLAP	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0 Business Objects XI R2
OLAP	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
OLAP	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 / 8250 / 8150 HP ProLiant BL465c / BL685c
OLAP	Service Platform	Hardware /	Wide Area	USACE Network

	and Infrastructure	Infrastructure	Network (WAN)	
OLAP	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
OLAP	Service Platform and Infrastructure	Hardware / Infrastructure	Certificates / Digital Signatures	Secure Sockets Layer (SSL) Firewall
OLAP	Component Framework	Business Logic	Platform Dependent Technologies	Business Objects XI R2
OLAP	Component Framework	Data Management	Database Connectivity	Neteeza Performance Server v4.0
Data Mart	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Data Mart	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Data Mart	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Data Mart	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Data Mart	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Data Mart	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Data Mart	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Data Mart	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Data Mart	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Data Mart	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Data Mart	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC
Data Warehouse	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Data Warehouse	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Data Warehouse	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Data Warehouse	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Data Warehouse	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Data Warehouse	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Data Warehouse	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)



Data Warehouse	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Data Warehouse	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Data Warehouse	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Data Warehouse	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC
Extraction and Transformation	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Extraction and Transformation	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Extraction and Transformation	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Extraction and Transformation	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Extraction and Transformation	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Extraction and Transformation	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Extraction and Transformation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Extraction and Transformation	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Extraction and Transformation	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Extraction and Transformation	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Extraction and Transformation	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC
Loading and Archiving	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Loading and Archiving	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Loading and Archiving	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Loading and Archiving	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Loading and Archiving	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Loading and Archiving	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Loading and Archiving	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Loading and Archiving	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network

Loading and Archiving	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Loading and Archiving	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Loading and Archiving	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC
Legacy Integration	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Neteeza Performance Server v4.0
Legacy Integration	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0
Legacy Integration	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Legacy Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development)
Legacy Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Legacy Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Enterprise Application Integration	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Neteeza Performance Server v4.0
Enterprise Application Integration	Service Platform and Infrastructure	Delivery Servers	Application Servers	Neteeza Performance Server v4.0
Enterprise Application Integration	Service Platform and Infrastructure	Database / Storage	Database	Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development)
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	USACE Network
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Data Integration	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service 1521 Standard Listener Port (CEFMS / P2) 31538 Listener Port (DataStage) Ports 5480 / 5481 / 5482 / 5483 / 5484 (Neteeza) Port 22 (SSH)
Data Integration	Service Access and Delivery	Delivery Channels	Intranet	USACE Network
Data Integration	Service Access and Delivery	Service Transport	Service Transport	TCP/IP
Data Integration	Service Platform and Infrastructure	Support Platforms	Platform Dependent Technologies	Solaris
Data Integration	Service Platform and Infrastructure	Delivery Servers	Application Servers	IBM Ascential DataStage Enterprise Edition v7.5 Neteeza Performance Server v4.0
Data Integration	Service Platform and Infrastructure	Database / Storage	Database	Oracle 10g Database Server (DataStage) Neteeza 10200 Database (Production) Neteeza 8250 Database (Development) Neteeza 8150 Database (COOP)
Data Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Neteeza 10200 (Production) Neteeza 8250 (COOP) Neteeza 8150 (Development) SUN M5000 (DataStage)
Data Integration	Service Platform	Hardware /	Wide Area	USACE Network

	and Infrastructure	Infrastructure	Network (WAN)	
Data Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	10/100/1000BASE-T Switch
Data Integration	Component Framework	Business Logic	Platform Dependent Technologies	IBM Ascential DataStage Enterprise Server v7.5
Data Integration	Component Framework	Data Management	Database Connectivity	Standard ODBC/JDBC

6. Will the application leverage existing components and/or applications across the Government (i.e., USA.Gov, Pay.Gov, etc)? **no**
- a. If "yes," please describe. [Not answered]

## Part II: Planning, Acquisition And Performance Information

### Section A: Alternatives Analysis

1. Did you conduct an alternatives analysis for this investment? **yes**
- a. If "yes," provide the date the analysis was completed? **Jun 1, 2007**
- b. If "no," what is the anticipated date this analysis will be completed? [Not answered]
- c. If no analysis is planned, please briefly explain why: [Not answered]

2. Alternatives Analysis Results:			
Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
Do Nothing	Continue to do "Business As Usual". Do not deploy any additional capability to users to track, aggregate or report on business needs. Do not deploy any Business Intelligence capabilities to allow comparison of de-normalized data.	0	0
CEFMS Reengineering	Develop and deploy CEFMS Division & National reporting systems. Users will enter different module to create new reports.	0	0
Data Warehouse	Build and deploy an Enterprise Data Warehouse with Business Intelligence reporting tools. Make this tool set Corps standard.	0	0

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen? **Doing nothing was not a option as there was a clear need to develop a means of reporting financial data at a division level in order to support Regional Financial Management initiatives. Enhancement of CEFMS would have supported the immediate reporting need but would not provide any further utility. The development and deployment of a Data Warehouse was selected as it represented the greatest capability for growth and flexibility in reporting operations. The USACE EDW solution is comprised of a Netezza data warehouse appliance with a Business Objects reporting tool suite. This allows for the collection and aggregation of data from multiple transactional systems and the representation of this data using several different visualization tools.**
- a. What year will the investment breakeven? (Specifically, when the budgeted costs savings exceeded the cumulative costs.) **2012**

4. What specific qualitative benefits will be realized? **When fully implemented the EDW will support a wide range of qualitative benefits available to both internal and external customers. These capability improvements include - Dynamic reporting: Users will no longer need to outline their needs to specialized IT personnel but will actually be able to utilize the Web Intelligence capabilities to define and create their own queries with minimal training. - Dashboards: The Business Objects BI tool suite is designed to support budget and performance monitoring dashboards. Adoption of Dashboard technologies will shorten improve the amount and quality of data available to Corps management in addition to supporting a reduction in the decision timeline supporting a move from reactive to proactive management. - Automatic Aggregation: Automated aggregation of data will support an improvement in data quality by removing the possibility of transcription errors while freeing Corps employees to perform deeper investigations into the root causes for performance issues. - Common repository for USACE data: The EDW is intended to be the single source for highly shared data within the USACE. This will greatly reduce the maintenance costs associated with system interconnections and allow the retirement of multiple legacy systems. - Common reporting tools: The adoption of the Business Objects tool suite as the standard across teh Corps will allow for greater standardization and more universal skill development across the workforce.**

5. Federal Quantitative Benefits (\$millions):				
	Budgeted Cost Savings	Cost Avoidance	Justification for Budgeted Cost Savings	Justification for Budgeted Cost Avoidance
PY-1 and Prior				
PY				
CY				
BY	2	0	Sunset the Datamarts and related district spec reporting tools	
BY+1				
BY+2				
BY+3				
BY+4 and Beyond				
Total LCC Benefit	2	0	<b>LCC = Life-cycle cost</b>	

6. Will the selected alternative replace a legacy system in-part or in-whole? **yes**
- If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment? **This Investment**
  - If "yes," please provide the following information:

List of Legacy Investment or Systems		
Name of the Legacy Investment or Systems	UPI if available	Date of the System Retirement
USACE Resource Management Data Marts		Aug 1, 2009

**Section B: Risk Management (All Capital Assets)**

- Does the investment have a Risk Management Plan? **yes**
  - If "yes," what is the date of the plan? **Jul 1, 2008**
  - Has the Risk Management Plan been significantly changed since last year's submission to OMB? **no**
  - If "yes," describe any significant changes: **[Not answered]**

2. If there currently is no plan, will a plan be developed? [Not answered]
  - a. If "yes," what is the planned completion date? [Not answered]
  - b. If "no," what is the strategy for managing the risks? [Not answered]
  
3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule: **We conducted a risk assessment to identify risks associated with this investment in the 19 OMB risk categories. The risk owner with support of the team conducted the analysis to determine the probability and impact of the risk occurring. As needed for risks exceeding the risk threshold; mitigation plans were developed and the life cycle costs and schedule adjusted. Through routine monitoring and tracking by risk owner (monthly and quarterly), risks are discussed at project status meetings and action taken as needed to manage the risk and the impact to scope, costs, and schedule.**

**Section C: Cost and Schedule Performance (All Capital Assets)**

1. Does the earned value management system meet the criteria in ANSI/EIA Standard - 748? **yes**
2. Is the CV% or SV% greater than  $\pm 10\%$ ? (CV%= CV/EV x 100; SV%= SV/PV x 100) **no**
  - a. If "yes," was it the? [Not answered]
  - b. If "yes," explain the causes of the variance: [Not answered]
  - c. If "yes," describe the corrective actions [Not answered]
  
3. Has the investment re-baselined during the past fiscal year? **no**
  - a. If "yes," when was it approved by the agency head? [Not answered]

**4. Comparison of Initial Baseline and Current Approved Baseline:**

Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
	Planned Completion Date	Total Cost (\$M) Estimated	Completion Date Planned:Actual		Total Cost (\$M) Planned:Actual		Schedule:Cost (# days:\$M)		
Complete Pilot Project	May 25, 2007	0.15	Jul 15, 2007	Aug 1, 2007	0	0	1	0	100
Data Design for Production	Jun 13, 2008	0.3	Jun 13, 2008	Jul 9, 2008	0.3	0.35	1	-0.05	100
System Architecture for Production Environment	Jul 9, 2008	0.4	Jul 9, 2008	Jul 9, 2008	0.4	0.35	1	0.05	100
Implementation:	Nov 9, 2008	0.16	Nov 9, 2008	[Not answered]	0.16	0.03	1	0	19
Deployment & Growth	Jun 23, 2010	0.26	Jun 23, 2010	[Not answered]	0.26	0.01	1	0	7