# Global Services

| Project Change Request | Contract #: CFTJQOP |
|---|---|
| **Customer Name:** The School Board of Palm Beach County, Florida | Work #: CQPWX |
| **Customer Number:** 6873401 | **PCR#:2** |
| **Reference Agreement:** Florida State Term Software contract: 252-008-05-ACS | **Contract End:** 09/28/07 |

## Description of Proposed Change:

This section defines the scope of service that will be provided by IBM under the terms and conditions of the Florida State Term Software contract: 252-008-05-ACS

IBM will provide Services as needed for a fixed price of $ 250,000.00 for Tivoli Identity Manager Support Services with the deliverables listed in the Deliverable Guidelines section of this document.

Travel and living expenses are in addition to the above services charges and are currently estimated at 15% - 20% of the professional fees. Travel and living expenses will be invoiced monthly.

Invoices are payable upon receipt.

## Scope of Services

The scope of this project is to provide for the installation and configuration of the Tivoli Identity Manager (TIM) server components in the Unix test environment (including the IBM Directory Server to serve as the TIM Lightweight Directory Access Protocol (LDAP), the specific TIM agents described below, and IBM Directory Integrator (IDI) (collectively, "Software"). The Software for the test and production environment will be configured for a clustered ITIM environment, and utilize the existing IBM P550Q AIX server for test, and newly purchased IBM P550Q servers for the production environment.

The configuration of the Software shall enable policy based provisioning in School District Palm Beach County (SDPBC) testing environment and be utilized to establish Identity Management staging for the production environment.

A simple demonstration of the Software functionality will be provided, testing and skills instruction will be conducted, and relevant documentation will be provided for the target platforms associated with the following TIM agents:

| AGENT NAME | TARGET PLATFORM | NUMBER OF INSTANCES OF AGENTS TO BE INSTALLED |
|---|---|---|
| Windows 2003 System | Windows 2003 Active Directory | 1 |
| People Soft Application | AIX | 1 |
| Microsoft Exchange - Email | Windows /2003 | 1 |
| Z Series RACF | MVS | 1 |

### 1. Conduct a Security Framework Review Workshop (8 Hours)

IBM will conduct one workshop of up to eight hours to review the SDPBC Security Framework consisting of predefined SDPBC security policies, standards, and the procedures for enforcing those policies. The purpose of this review is for the IBM Team to gather knowledge of the requirements that the Updated Reference Architecture Solution Design Document must fulfill.

IBM will:

1. Conduct the security workshop

2. Lead the joint development of Security Guiding Principles for data security at SDPBC

3. Lead discussion and assist on establishing a common password methodology for users of SDPBC

4. Document the developed principles in the Security Guiding Principles document

**Completion Criteria**: This task will be complete at the conclusion of the SDPBC Security Framework Review Workshop.

**Deliverables**: Security Guiding Principles

### 2. Install and Configure the TIM / TAM Server Components in the Test and Production Environment

IBM will perform the following tasks pertaining to the installation and configuration of the TIM / TAM server components on the IBM P550Q AIX system:

1. IBM will assist with the setup and configuration of the IBM AIX hardware in the test and production environments.

2. Assist SDPBC staff with preparation of the testing environment by providing basic skills leadership and recommendations based upon past implementation experiences.

3. Assist SDPBC staff with the installation and configuration of the TIM / TAM software server components in the testing and production environments.

4. Document the installation and configuration parameters, environment details, and scripts and operational considerations of the actual installation in the Installation History Document. This will also include any changes to the Reference Architecture Solution Design Document made specifically for the SDPBC testing environment.

5. Assist with the ITAMeb / ITIM test design and configuration.

6. Assist with Detailed Design and configuration of the Test Hardware Environment to meet business requirements, to include:
   - N/C SSO Design
   - Vendor Portal TAMeb SSO / Security Design
   - ITIM Integration and end User Self – Service
   - Assist in defining, designing and validation Vendor data feed processes, Vendor account provisioning, and vendor user administration
   - Assist in UI customization and product customizations as required

This task will be complete when the TIM /TAM server components are installed and configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed and the Installation History Document is completed.

**Deliverables:** Installation History Document

**3. Implement one HR People Soft Identity Data Feed, and Education Data Warehouse Student Feed to TIM Using IDI for the Test and Production Environment**

One HR People Soft data feed and one EDW data feed into TIM via IDI will be configured. These data feeds will provide for both the initial HR data load and student and for future incremental data feeds.

IBM will perform the following tasks with respect to the SDPBC HR Identity Data Feed to TIM Using IDI:

1. Assist SDPBC staff with the installation of IDI in the testing and production environment.

2. Assist SDPBC staff with the creation of accounts with appropriate authorities that will be used during the testing of the IDI connectors and directory synchronization processes.

3. Configure access to the versions of the connected systems provided by SDPBC for use in the testing of the IDI connectors and assembly lines.

4. Define and implement an IDI assembly line for a standard SDPBC HR People Soft data feed format.

5. Define and implement an IDI assembly line for a standard SDPBC Education Data Warehouse

6. Create People Soft employee attribute matrix of attributes that will be used to create TIM employee identity.

7. Create Student attribute matrix that will be used to create TIM student identity.

8. Create the Installation History Document and update the Reference Architecture Solution Design Document.

**Completion Criteria**: This task will be complete when the necessary IDI assembly lines are created, an identity data feed to TIM is completed successfully, and the updates to the Installation History Document and the Reference Architecture Solution Design Document are completed.

**Deliverables**: Installation History Document, Updated Reference Architecture Solution Design Document

### 4. Install and Configure the TIM Agents

For each of the TIM agents, IBM will:

1. Assist SDPBC staff with preparation of the testing environment by providing basic skills leadership and recommendations based upon past implementation experiences.

2. Assist SDPBC staff with the installation and configuration of the TIM agent in the testing environment.

3. IBM will install the following Agents: (Active Directory, RACF, MS Exchange, AIX)

4. Document the installation and configuration parameters, environment details, and scripts and operational considerations of the actual installation in the Installation History Document. This will also include any changes to the Reference Architecture Solution Design Document made specifically for the SDPBC testing environment.

5. Configure the TIM server to recognize and communicate with the TIM agent.

6. Perform an initial reconciliation of the managed resource controlled by the agent in order to retrieve existing account data to populate the TIM server.

7. Advise SDPBC on orphan account (accounts with no readily identifiable identity) cleanup procedures.

8. Assist SDPBC with the ITIM agent deployment in the production environment.

**Completion Criteria**: This task will be complete when the TIM agents are installed and configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed and the updates to the Installation History Document are completed.

**Deliverables**:  Installation History Document, Updated Reference Architecture Solution Design Document

### 5. Implement SDPBC Updated Reference Architecture Solution Design in TIM and TAM

IBM will tailor the Reference Architecture Solution Design Document for mutually agreed to requirements to fit the SDPBC testing environment and update the documentation to reflect the SDPBC organization.  To the extent necessary to execute the mutually agreed upon Test Plan, IBM will assist SDPBC in implementing the following configurations:

1. Implement TIM Organizational Units – configure individual organizational units that represent a portion of the SDPBC organization that will be utilizing TIM.

2. Implement TIM Groups - configure groups that are used for access control within TIM.

3. Implement TIM Access Control Information - configure what users can and cannot do within TIM.

4. Implement TIM Roles - configure roles that are used to define sets of users that should all be provisioned in the same manner or that are participants in workflows in TIM.

5. Implement TIM Provisioning Policies – configure provisioning procedures that control which roles receive which entitlements and what the values are of the attributes for the provisioned accounts.

6. Implement TIM Password Policies – configure password procedures that constrain what values are valid when a user changes a password for one of their accounts in TIM. Implement TIM Identity Policies – configure identity policies that control how TIM automatically generates an account ID when a new account is provisioned.

7. Password reset and synchronization will be tested.

8. Implement TIM Identity Policies – configure identity policies that control how TIM automatically generates an account ID when a new account is provisioned.

9. Develop TAM Organizational Units – configure individual organization units within a portion of SDPBC organization that will be utilizing TAM.

10. Develop TAM Groups - configure which access control groups are available within TIM.

11. Develop TAM Roles - configure which applications a user will have access to and what permissions they will need for a given role

12. Develop TAM Password Policies – configure password policies for TAM

13. Document the installation and configuration parameters, environment details, and scripts and operational considerations of the actual installation in the Installation History document. This will also include any changes to the Reference Architecture Solution Design Document made specifically for the SDPBC testing environment.

**Completion Criteria**: This task will be complete when TIM is configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed, the updates to the Installation History Document are completed and the updates to the Reference Architecture Solution Design Document are completed.

**Deliverables**: Installation History Document, Updated Reference Architecture Documentation

## 6. TIM Self Care Application Branding

IBM will tailor the TIM self care password reset application to be branded as the School District of Palm Beach County. All application and web screens that the end user has access to and will be using need to be branded. All communications from the Tivoli System need to be branded. A wrong password will be rejected by the branded application.

IBM will

1. Gather and document requirements

2. Customize the header of the current Self Care Application

3. Customize the color of the pages of the Self Care Application

4. Customize the header of the enrollment portion of the Self Care Application.

5. Customize the color of the pages of the enrollment portion of the Self Care Application.

6. Customize only those emails which are identified as used for end user communication

7. Deploy in Production environment

8.  Document installation, configuration, and deployment procedures

9.  Test the production environment implementation

**Client Responsibilities:**

*   SDPBC will provide all graphics and color requirements Documentation

**Assumptions:**

*   No functional or text changes will be made within the current Self Care Application for this specific branding task.

*   Email notification templates are the only ITIM configuration that will need to be modified to support this new Self Care Application customizations

**Completion Criteria:**

This task will be complete when TIM is configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed, and the updates to the Reference Architecture Solution Design Document are completed.

**Deliverables:**  Updated Reference Architecture Documentation

## 7. TIM Self Care Application Enrollment Process

IBM will define and document the enrollment process for the TIM self care password reset application.

IBM will:

1.  Gather and document requirements

2.  Develop and document flow and design in design document

3.  Develop the registration portion of the Self Care Application for employees

4.  Develop the registration portion of the Self Care Application for students

5.  Deploy the Self Care Application in the production environment

6.  Document installation, configuration, and deployment procedures

7.  Develop test cases

8.  Test the Self Care Application in the production environment

**Client Responsibilities:**

*   SDPBC will dictate the enrollment flow

**Assumptions:**

*   Current Self Care Application will be extended to include enrollment

*   Employees and Students will be using the same application but will have different flows

- Only users who exist within ITIM will be able to register (through the identity feed)

Current ITIM configuration will not need to be modified to support this new Self Care Application functionality

**Completion Criteria**: This task will be complete when TIM is configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed, and the updates to the Reference Architecture Solution Design Document are completed.

**Deliverables**: Updates to the Reference Architecture Solution Design Document

## 8. Develop and Execute ITIM Test Plan

Regarding the Test Plan, IBM will:

1. Assist SDPBC staff with preparation of the Test Plan and Results Document by providing basic skills leadership and recommendations based upon past implementation experiences.

2. Work jointly with the SDPBC staff to execute the mutually agreed upon Test Plan to verify functionality of the Software and to demonstrate that the Software can be configured to meet SDPBC provisioning business needs.

3. Provide SDPBC a capacity requirement projection for the TIM / TAM environment.

4. Document the test plan and results in the Test Plan and Results Document

5. Document the capacity requirements projections in the TIM/TAM Capacity Projection document

**Completion Criteria**: This task will be complete when the Test Plan is created, all tests have been executed, and the test results are recorded.

**Deliverables**: Test Plan and Results Document, TIM/TAM Capacity Projection

## 9. Develop Hardware Plan for Test and Production Environment

1. Assist SDPBC with the hardware configuration and sizing for the IBM Tivoli Access Manager and IBM Tivoli Identity Manager Test and Production Environment

2. Create a hardware and software Architectural diagram for SDPBC security manager

3. Create hardware configuration based on TIM application sizing requirements

4. Assist SDPBC with a Hardware and Application Risk assessment for Identity Management

**Completion Criteria**: This task will be complete when SDPBC has documented the test and production environment hardware plans

**Deliverables**: None

### 10. ITIM Administration Education and Training

IBM will provide a 3 day on-site ITIM administration training via the IBM eLearning process for up to 10 SDPBC personnel.

**Completion Criteria**: This task will be complete when IBM has conducted ITIM on-site administration training

**Deliverables**: None

### 11. Assist SDPBC to Identify the Organizational Implications for the new Security Environment

1. Assist SDPBC with the development of its Roles and Responsibilities guidelines
2. Assist SDPBC with the development of Security Job Descriptions
3. Assist SDPBC with defining the educational requirements for ITIM and ITAM

**Completion Criteria**: This task will be complete when SDPBC has documented the roles and responsibilities and an education plan.

**Deliverables**: None

### 12. Resource Access Control Facility (RACF) Identity Integration

Users must be able to reset their RACF password via the Self Care Application.

NOTE: Tivoli Person account AND their Active Directory Account passwords must be synchronized. RACF must NOT be synchronized.

IBM will:

- Gather and document requirements for RACF integration
- Gather and document requirements for RACF integration with the Self Care Application
- Document RACF integration and Self Care Application design
- Develop the RACF password reset flow in the Self Care Application
- Install the RACF ITIM Agent adapter in production environment
- Configure RACF Agent adapter to communicate with test MF environment

- Assist SDPBC in configuration of RACF in test MF environment
- Assist SDPBC with RACF account reconciliation
- Develop Test cases
- Test RACF password management in test
- Test RACF Selfcare Application in test
- Reconfigure RACF adapter to communicate with production MF environment
- Assist SDPBC in configuration of RACF in production MF environment
- Deploy the Selfcare Application in production
- Document installation, configuration, and deployment procedures
- Test RACF password management in production
- Test RACF Self Care Application in production

**Client Responsibilities**:

- SDPBC will provide mainframe administrators and technical resources to assist with the deployment
- Unique attribute must exist to link RACF accounts to ITIM person objects. SDPBC must populate this attribute.
- SDPBC will provide any required hardware

**Assumptions:**

- RACF reverse password reset will not be used at this time until LDAP is enabled on mainframe
- RACF password must be able to be reset using the Self Care Application

**Completion Criteria**: This task will be complete when TIM is configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed, and the updates to the Reference Architecture Solution Design Document are completed.

**Deliverables**: None

### 13. Establish Active Directory provisioning for Students

IBM will include the Student accounts from our EDW application into Active Directory (AD) based on input from SDPBC (No RACF tasks):

IBM will:

- Gather and document requirements of EDW Identity Feed
- Gather and document requirements of Student AD provisioning

- Gather and document requirements of Student Self Care Application
- Document the EDW Identity IDI Feed design
- Document the Student AD Provisioning design
- Document the Student Self Care Application design
- Create identity management provisioning policy for Students
- Create custom person object for Students
- Develop the EDW Identity IDI Bulk Feed
- Develop extension to current Self Care Application for Students
- Configure ITIM for AD student provisioning in test AD environment
- Deploy Student Self Care Application in production environment
- Deploy the EDW Identity Bulk Feed in test AD environment
- Deploy the ongoing EDW Identity IDI Feed in production AD environment
- Configure ITIM Student AD Adapter in production environment
- Configure production ITIM for Student AD provisioning in production environment
- Document installation, configuration, and deployment procedures
- Develop test cases
- Test Student AD provisioning in test AD environment
- Test Student Self Care Application in test AD environment
- Test EDW Identity Bulk and ongoing Feed in production environment
- Test Student AD provisioning in production environment
- Test Student Self Care Application in production environment

**Client Responsibilities**:

- Unique attribute must exist to link Student AD accounts to ITIM person objects. SDPBC must populate this attribute and provide it in the EDW identity feed.
- SDPBC will provide all attribute mappings for students to be provisioned to AD
- SDPBC will provide both EDW and AD technical resources to support the requirements, design, and deployment of the solution
- SDPBC will provide the AD provisioning algorithm.

- SDPBC will provide any required production hardware

**Assumptions:**

- EDW will be used as the identity feed for Students
- EDW identity bulk feed will be a CSV file
- Ongoing EDW identity change feed will be a CSV file
- EDW will contain all required student attributes for provisioning to Active Directory
- Student AD accounts belong to the same domain as Employee accounts
- Student ITIM person objects will be populated in the ITIM Org Tree based on existing Active Directory OU structure
- One role will be created within ITIM to support Student provisioning to AD
- No workflows will be created

**Completion Criteria**:   This task will be complete when the TIM server components are installed and configured in the testing environment to the extent where the mutually agreed upon Test Plan can be executed and the Reference Solution Architecture design Document is updated.

**Deliverables**:  Updates to the Reference Solution Architecture Document

## 14. Create Reference Solution Architecture Document

IBM will provide PeopleSoft / Tivoli interface functional specification assistance.

- Work with SDPBC resources to gather information on existing PeopleSoft environment.
- Define the application messages, field attributes, data values and the business processes which will feed the Tivoli environment.
- Complete document with sufficient detail to permit Tivoli development team to complete its technical work.

**Assumptions:**

- SDPBC will provide the information and the system access requested to complete the functional specification.

**Completion Criteria**:  This task will be complete when IBM has delivered 1 copy of the Reference Solution Architecture Document to the SDPBC Project Manager

**Deliverables**:  Reference Solution Architecture Document

## 15. Assist SDPBC with the Migration of the ITIM Test to ITIM Production Environment

IBM Will:

- Promote existing Proof of Concept (POC) ITIM Test Environment to ITIM Production

- Assist with the implementation ITIM Production Environment on new P550Q AIX Hardware

- Assist in deploying, validating, and testing finalized ITIM production configurations

- Assist in defining, designing and validation of Production People Soft and EDW data feed processes, User account provisioning, and user administration

  ITIM Configuration and Customization for SDPBC Production Environment to include SDPBC specific look and feel (UI customization)

*Completion Criteria*:  This task will be complete when the ITIM production environment is ready for testing and acceptance.

*Deliverables*:  None

## Charges

This change authorization adds the above services and deliverables listed for a total fixed charge of $250,000.00

Travel and living expenses are in addition to the above services charges and are currently estimated at 15% - 20% of the professional fees.  Travel and living expenses will be invoiced monthly.

IBM will invoice you monthly for work performed.

Invoices are due upon receipt.

This offer expires on May 18, 2007.

The duration of the project is expected to last between 15 to 17 weeks. IBM will make every effort with SDPBC cooperation to complete this project on schedule.

Estimated Start Date = June 4, 2007

Estimated End Date = September 28, 2007

Both Parties agree that the complete agreement between them about these Services consists of 1) this Change Authorization, the original Statement of Work (deemed a

Task Order or Purchase Document) with its related documents, and 2) the Florida
State Term Software contract:  252-008-05-ACS

# Deliverables Guidelines

## Project Status Reports

**Purpose:**  IBM will provide a Project Status Report each week during the project to
describe the activities that took place during that period.  Significant accomplishments,
milestones, and concerns will be described.

**Delivery:**  One hard copy will be delivered to the SDPBC Project Manager within 5
working days following the reporting period.

**Content:**  The report will consist of the following, as appropriate:
- Activities performed during the reporting period
- Activities planned for the next reporting period
- Project change control activity
- Problems, concerns, and recommendations
- Expenses incurred during reporting period and project to date

## Security Guiding Principles

**Purpose:**  IBM documents the Security Guiding Principles that will govern the decisions
to be made for data security within SDPBC.

**Delivery:**  One hard copy will be delivered to the SDPBC Project Manager.

**Content:**  For each guiding principle, the report will consist of the following:
- Guiding Principle
- Rationale for the Guiding Principle
- Implications of the Guiding Principle

## Updated Reference Architecture Solution Design Document

**Purpose:**  As a result of the Reference Architecture Solution Design Document Review
Workshop, the Reference Architecture Solution Design Document will be updated to
reflect the SDPBC environment.  This Updated Reference Architecture Solution Design
Document will be used as the blueprint for the remainder of the engagement and will form
the foundation for identity management at SDPBC.

**Delivery:**  One soft copy (MS Word format) will be delivered to the SDPBC Project
Manager at the conclusion of this engagement.

**Content:**  The document will consist of the following:
- Software Component Architecture
- TIM designed to support provisioning for:
  - TIM Self-Service User
  - TIM Admin
  - Microsoft Active Directory
  - Microsoft Exchange
  - RACF User
  - RACF Admin
- IBM Directory Server designed to support:
  - Standard schema based on inetorgperson object class, X.500
    compatible

- o Standard LDAP authentication for both certificate and non-certificate requests
- IDI designed to support:
  - o PeopleSoft Identity Data Feed to TIM
  - o Education Data Warehouse Feed to TIM

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## Installation History Document

**Purpose:** IBM will provide a document describing the installation and configuration of the Software components for identity management in the SDPBC environment. This will form the basis for SDPBC to maintain the documentation following this engagement.
**Delivery:** One soft copy (MS Word format) will be delivered to the SDPBC Project Manager at the conclusion of the engagement.
**Content:** The document will consist of the following, as appropriate:
- For each component in the environment:
  - o Release and version installed
  - o Date of the installation
  - o Comments regarding the installation as appropriate
- The components included in the Installation History will include:
  - o Operating System
  - o TIM Modules
  - o IDI Modules

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## Test Plan and Results Document

**Purpose:** IBM will provide a Test Plan and Results Document to identify the tests to be performed, to provide a record of signoff by SDPBC on acceptance of the test, and to allow comments on the results of those tests.
**Delivery:** One hard copy will be delivered to the SDPBC Project Manager at the conclusion of the engagement.
**Content:** The report will consist of the following for each test planned / performed:
- Test to be performed
- Date of test
- Signature of the SDPBC representative responsible for accepting the test
- Date of the acceptance signature
- Comments pertaining to the results of the test performed

## TIM/TAM Capacity Projection

**Purpose:** IBM will provide a TIM/TAM Capacity Projection based on the TIM/TAM environment as implemented, the number of accounts projected, and the number of provisions / authentications projected.

**Delivery:** One hard copy will be delivered to the SDPBC Project Manager at the conclusion of the engagement.

**Content:** The report will consist of the following:
- DASD Space Requirements
- Server sizing requirements

## Customer Agreement
## Product Change Request
## Custom Services

Agreed to: **School Board of Palm Beach County**     Agreed to: **International Business Machines**

By _____

Authorized signature

Name (type or print)

Date:

Customer number:     **6873401**

Customer address:

**3344 Forest Hill Blvd**

**West Palm Beach, FL 33406**

By_____

Authorized signature

Name (type or print):

Date:

IBM Office Address:

**8051 Congress Ave**

**Boca Raton, FL 33487**

Project name or identifier: SDPBC

Estimated Start Date: **June 4th, 2007**

Estimated End Date:  **September 28th, 2007**

Reviewed and Approved
as to Legal Sufficiency
*[signature]* 4/16/07