

The Career Management Account Pilot Program

Using PKI to authenticate Customers,
increase security, and permit the exchange
and viewing of validated documents.

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What is the..... **CAREER MANAGEMENT ACCOUNT?**

**LIFELONG
LEARNING**



**CAREER
DEVELOPMENT**

**A SAFE AND CONVENIENT PLACE TO COLLECT,
STORE, AND MANAGE ALL OF YOUR LIFELONG
LEARNING AND CAREER DEVELOPMENT
INFORMATION INCLUDING THIRD PARTY
VALIDATED RECORDS AND CREDENTIALS.**

PRIVACY POLICY & SECURITY

LEARN MORE

HELP

FAQ

VALIDATED SERVICES

ADVISORY SERVICES

INFORMATION PROVIDERS

INFORMATION RECIPIENTS



Partners

ACT
Partners for Life's Education

WASHINGTON ARMY
NATIONAL GUARD



"Citizens serving citizens
with pride and tradition"



The **CMA PILOT PROGRAM** lets you.....

- ▶ Set up your own private safety deposit box to store all of your valuable lifelong learning and career information in a single portfolio
- ▶ Obtain an electronic ID so you can send licenses, transcripts, certificates and other **VALIDATED** records to employers and learning institutions
- ▶ Use the latest career development tools like the **Financial Aid Advisor** and **Employability Checkup** to improve your career choices, and
- ▶ Use the CMA View Generator to showcase your skills, experiences and credentials on your own personalized Web Site.

▶ **SEE SAMPLES**

Select One

SIGN UP

LOG IN

AMERICA'S
CAREERINFONET 

AMERICA'S
LEARNINGEXCHANGE 

AMERICA'S
JOBBANK 

AMERICA'S
SERVICELOCATOR 



Network Consortium

Mary Jane creates her own Personalized Website to market her skills

The screenshot shows a Microsoft Internet Explorer browser window displaying a website for Mary Jane. The address bar shows the URL <http://cma01.govoffice.com/>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains Back, Forward, Stop, Home, Search, Favorites, History, and Print buttons. The website's header features the name "Mary Jane" in a large, yellow, italicized font, with the subtitle "A Dedicated Public Servant" below it. A navigation menu on the left side lists various sections: Welcome!, My Resume, My Publications, My Transcripts, Personal Data, Contact Me, Employer Views, Awards, and My Links. Below the navigation menu is a "Comment Form" section with the text "Please send me your comments or questions using this form." and a "Continue" link. The main content area is titled "My Career Management Account" and features a portrait of Mary Jane. To the right of the portrait is a paragraph of text: "Thank you for visiting my career management account! I have organized my site to give prospective employers an easy tool to learn about my experience, training and interests. At this site you will find in-depth background data, validated education and training information, examples of some recent work product, professional references and much more." Below this text is another paragraph: "At any point during your visit feel free to use the search tool to help direct you to topics that are of interest to you. Also, I would appreciate it if you would take a minute to send me your comments concerning this site and its contents through the contact me, comment form or employer survey sections on the navigation bar." At the bottom of the main content area, there is a date "January 2001" and a closing paragraph: "Thanks again for visiting my site. I look forward to hearing from you soon about available opportunities with your organization." The browser's status bar at the bottom shows the Internet icon and the text "Internet".

<http://cma01.govoffice.com/> - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print

Address Links >>

Mary Jane

A Dedicated Public Servant

- Welcome!
- My Resume
- My Publications
- My Transcripts
- Personal Data
- Contact Me
- Employer Views
- Awards
- My Links

Comment Form

Please send me your comments or questions using this form.

[Continue](#)

My Career Management Account



Thank you for visiting my career management account! I have organized my site to give prospective employers an easy tool to learn about my experience, training and interests. At this site you will find in-depth background data, validated education and training information, examples of some recent work product, professional references and much more.

At any point during your visit feel free to use the search tool to help direct you to topics that are of interest to you. Also, I would appreciate it if you would take a minute to send me your comments concerning this site and its contents through the contact me, comment form or employer survey sections on the navigation bar.

January 2001

Thanks again for visiting my site. I look forward to hearing from you soon about available opportunities with your organization.

Internet

Lifelong Learning Portfolio: Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Address Links

HOME PRIVACY POLICY SECURITY ABOUT US HELP

VALIDATED SERVICES ADVISORY SERVICES INFORMATION PROVIDERS INFORMATION RECIPIENTS FEEDBACK

lifelong learning PORTFOLIO SIGN OFF HELP

Mary Jane

Enter Share View

Welcome back Mary Jane

Last log in : Oct 19, 2001 4:38 PM Storage Available : 19.76 MB



Getting Started

[Enter](#)
Enter new information by completing the data fields in your portfolio or by uploading selected files.

[Share](#)
Share selected information from your portfolio by creating customized folders for others to view.

[View](#)
View selected information from other persons' portfolios to which you have been given access.

[SELECT A DIFFERENT IMAGE](#)

Done Internet

Adding Validated Records

The screenshot shows a web browser window titled "Lifelong Learning Portfolio: Enter - Microsoft Internet Explorer". The browser's address bar is empty, and the menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The website header features a logo with the letters C, M, and A, the text "lifelong learning PORTFOLIO", and navigation links for "SIGN OFF" and "HELP". The user's name, "Mary Jane", is displayed in the top right. Below the header, there are three tabs: "Enter" (selected), "Share", and "View".

The main content area contains a paragraph: "With your *Enter Function*, you may complete or edit the data fields under each category, add or delete categories, or upload a variety of multimedia files."

On the left side, there are two sidebar elements:

- FILE MANAGER**: Represented by a folder icon.
- PORTFOLIO TIP**: Represented by a lightbulb icon. The tip text reads: "When you are entering information, be sure to click 'Save' before leaving the page."

The main content area is titled "Who I Am" and contains a list of categories, each with a plus sign icon:

- [Personal Data](#) [Quick Entry Form](#)
- [Qualities and Characteristics](#)
- [Experience](#)
- [Skills](#)
- Validated Records & Recognition**
 - [Transcripts](#)
 - [Assessments](#)
 - [Consolidated Transcripts or Records](#)
 - [Licenses](#)
 - [Awards](#)
 - [Certificate of Accomplishments](#)
 - [Recommendations](#)
 - [Journal](#)

At the bottom of the page, there is a partially visible category: [Discovery](#).

The browser's status bar at the bottom shows "Done" on the left and "Internet" on the right.

Selecting a Validated Information Provider

The screenshot shows a web browser window titled "Lifelong Learning Portfolio: Transcript request - Microsoft Internet Explorer". The browser's address bar is empty, and the menu bar includes File, Edit, View, Favorites, Tools, and Help. The website's navigation menu is blue and contains the following items: HOME, PRIVACY POLICY, SECURITY, ABOUT US, HELP, VALIDATED SERVICES, ADVISORY SERVICES, INFORMATION PROVIDERS, INFORMATION RECIPIENTS, and FEEDBACK. Below the navigation menu, there is a header area with the "lifelong learning PORTFOLIO" logo on the left, a "SIGN OFF HELP" button in the center, and the name "Mary Jane" on the right. Below the header, there are three buttons: "Enter", "Share", and "View". The main content area is titled "Provider List" in blue text. Below the title, there is a section for "FILE MANAGER" and a "PORTFOLIO TIP" box. The "PORTFOLIO TIP" box contains the text: "When you are entering information, be sure to click 'Save' before leaving the page." The "FILE MANAGER" section contains a list of providers with radio buttons: "Test1 Provider", "ACT, Inc" (selected), "SCANS", and "ACAS". Below the list are "Submit" and "Reset" buttons. At the bottom of the page, there is a "Comment on this page" section with the text "COMMENTS WILL BE SHARED WITH THE CMA DESIGN TEAM". The footer of the page states: "The Career Management Account and the Lifelong Learning Portfolio are products of America's Career Kit." The browser's status bar at the bottom shows "Done" and "Internet".

lifelong learning
PORTFOLIO

SIGN OFF HELP

Mary Jane

Enter Share View

Provider List

Select the provider name from the list below

- Test1 Provider
- ACT, Inc
- SCANS
- ACAS

Submit Reset

FILE MANAGER

PORTFOLIO TIP

When you are entering information, be sure to click 'Save' before leaving the page.

Comment on this page
COMMENTS WILL BE SHARED WITH THE CMA DESIGN TEAM

The Career Management Account and the Lifelong Learning Portfolio are products of America's Career Kit.

User completes Information Required by Provider

lifelong learning PORTFOLIO

Mary Jane

Enter Share View

Transcript/Assessment Request

FILE MANAGER

PORTFOLIO TIP
When you are entering information, be sure to click 'Save' before leaving the page.

Required identification information

First Name:

Middle Name:

Last Name:

SSN:

Other required information

Begin (mm-dd-yyyy) : - -

End (mm-dd-yyyy): - -

Microsoft Internet Explorer

Start | GCO... | Can... | NET... | Pres... | Lifel... | 11:38 AM

ACT Transcript

VALIDATED SERVICES | ADVISORY SERVICES | INFORMATION PROVIDERS | INFORMATION RECIPIENTS | FEEDBACK



lifelong learning
PORTFOLIO

SIGN OFF

HELP

Information providers

Mary Jane

Enter

Share

View

Transcript Record

Step 2 of 2 : Contents

Select Transcript Records

| | COURSE ID | COURSE NAME | SCHOOL NAME | GRADE / COURSE GRADE |
|--------------------------|-----------|-------------------------------|---------------------|----------------------|
| <input type="checkbox"/> | CS101 | Programming Basics | University of Texas | 4 / 3.75(A) |
| <input type="checkbox"/> | CS105 | Assembly Language Programming | University of Texas | 4 / 3.33(A) |
| <input type="checkbox"/> | CS110 | Data Structures | University of Texas | 4 / 3.50(A) |
| <input type="checkbox"/> | CS115 | Java Programming | University of Texas | 3 / 3(A) |
| <input type="checkbox"/> | CS120 | Analytical Calculus | University of Texas | 4 / 3.25(A) |

How to Use an Information Broker to obtain validated records.

The screenshot shows a Microsoft Internet Explorer browser window displaying the National Validation Center website. The browser's address bar shows the URL: <http://66.7.4.230/VCenter/activitycenter/activitycenter.cfm>. The website header features the text "National Validation Center" and "The Nation's Source For Official Education & Training Records". Below the header is a navigation bar with buttons for "Home Page", "Learn More", "Create Your Account", and "Login". The main content area is titled "Lifelong Learning Archive Activity Center" and includes a "Begin Today!" link. A grid of seven categories is displayed, each with a representative image and text: "Colleges Attended", "Union & On The Job Training", "Proprietary Training", "Military Experience", "Licenses Earned", "Your Consolidated Transcript", and "Standardized Tests Taken".

Activity Center - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss Real.com

Address <http://66.7.4.230/VCenter/activitycenter/activitycenter.cfm> Go

National Validation Center The Nation's Source For Official Education & Training Records

Home Page Learn More Create Your Account Login

Lifelong Learning Archive Activity Center
Begin Today!

| | | | |
|--|---|--|--|
|  Colleges Attended |  Union & On The Job Training |  Proprietary Training |  Military Experience |
|  Licenses Earned |  Your Consolidated Transcript | |  Standardized Tests Taken |

SAMPLE CONSOLIDATED TRANSCRIPT

Untitled - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Address Links

Here Are All the College Credits You Have Earned For All the Learning You Have Achieved In Your Lifetime

Credits You Have Earned From College Courses You Have Already Taken

Central Texas College

| | | |
|---|---|-----|
| Calculus I | A | 3.0 |
| College Algebra | A | 3.0 |
| Communications Skills | B | 3.0 |
| History of US to 1877 | A | 3.0 |
| Introduction to Sociology | B | 3.0 |
| Total Credits Earned from this Institution: | | 15 |

College of Lake County

| | | |
|---|---|-----|
| Introduction to COBOL Programming | A | 3.0 |
| Introduction to Psychology | B | 3.0 |
| Introduction to Visual Basic Programming | A | 3.0 |
| Total Credits Earned from this Institution: | | 9 |

Southern Illinois University at Carbondale

| | | |
|---|---|-----|
| Detective Fiction | B | 3.0 |
| Intro to History-Western Civilization | B | 3.0 |
| Introduction to Art | C | 3.0 |
| Introduction to Economics | C | 3.0 |
| Reasoning and Problem Solving | C | 3.0 |
| Total Credits Earned from this Institution: | | 15 |
| Total Credits Earned From All Sources: | | 39 |

Done Internet

Digital Certificate Applications

- Authentication
- Encryption
- Data Integrity
- Non-Repudiation

Authentication may be based on three things:

1. What you know (password)
2. What you have (a smart card or token), or
3. Who you are: (retina, thumb print)

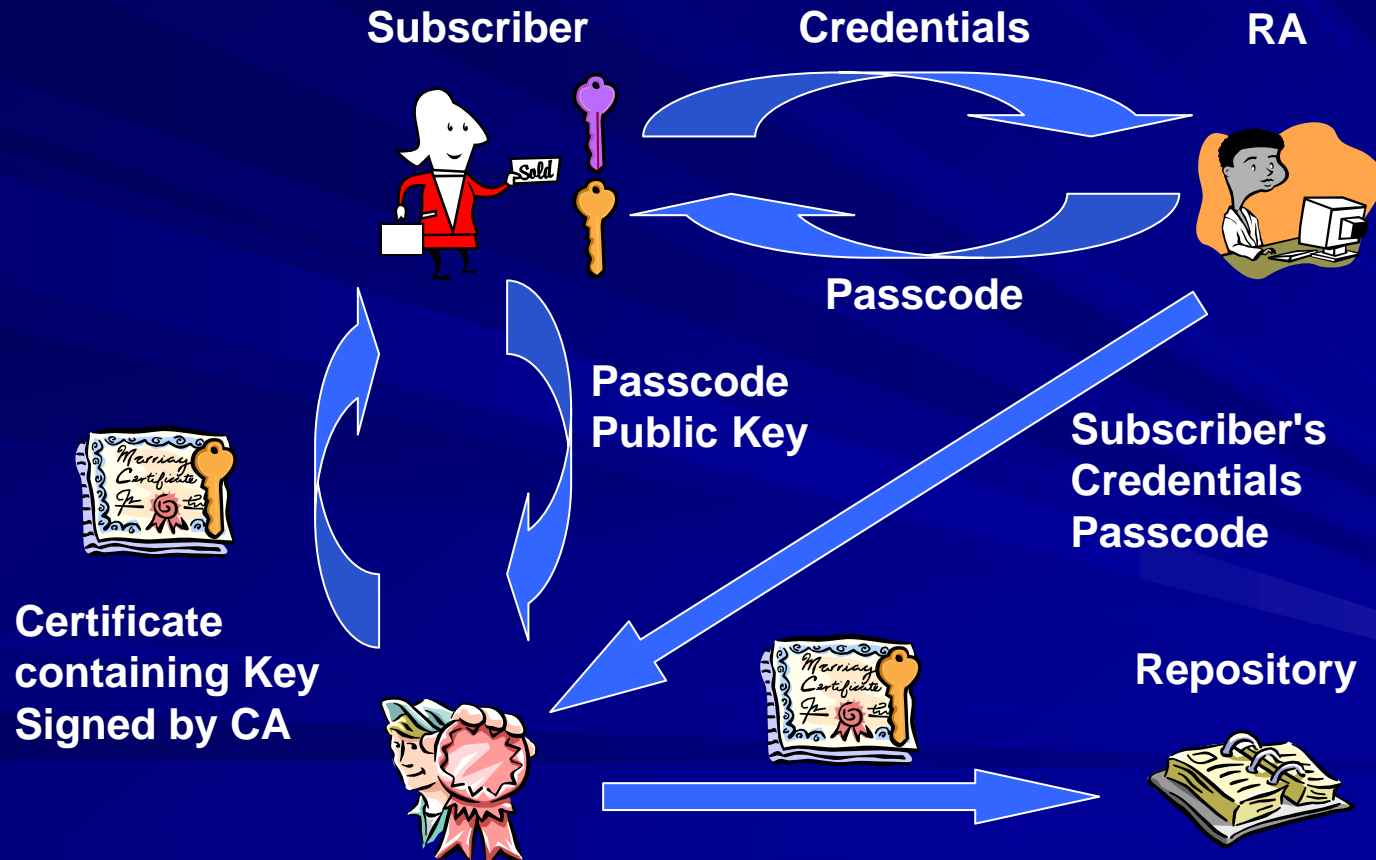
The more ways you authenticate a person, the stronger the system.

The CMA uses a combination of 1 and 2.

Validating the Certificates

- CAM checks validity of the certificate
- The CMA system makes sure the User Name and Password supplied by the certificate holder corresponds with the serial number on the certificate

How a PKI Issues Certificates



Vulnerability of Certificates

- If someone has access to your certificate and knows your username and password, they may access your account;
- The certificate may reside on the browser, be carried on a token, a floppy, or a smart card. Any of these could be compromised.
- It is the responsibility of the User to guard his/her certificate.

Obstacles to Obtaining a Digital Certificate

- Certain populations (e. students, low-income persons) may not have the conventional means for identity proofing such as a credit history, permanent address, etc.
- Certain individuals may object to divulging personal information such as mother's maiden name, SSN, credit card numbers, etc.
- Cost of the certificate

Coordinated System of Identity Proofing

- The LRA (s) provide the CA with a database containing a shared secret for each of its participating members;
- Examples of Shared Secrets: 1. Last 4 digits in one's SSN. 3. Military ID; 4. Union Card ID.
- The CA matches the shared secret provided by the individual with the database to determine eligibility for the program.
- Problem: Using just one shared secret makes impersonation much easier.

Benefits of PKI System for the Career Management Account Pilot

- Digital certificates authenticate the CMA Account holders, Information Providers and Recipients.
- Authenticated information providers who package data according to the LIPS standards in an XML format and use https over a secure socket (SSL) can transmit validated documents such as transcripts and assessments.
- Digital Certificates enhance the security and privacy of Users.