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User Guide for the Air Force Home Use Middleware Package

January 2007

Deliverable No. OE-07-29-011

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1. Introduction

1.1 Purpose

This document provides instructions on how to install and uninstall the *Home Use Middleware* (ActivCard Gold 3.0, AF version) and information regarding smart card readers and technical support.

Read all installation instructions prior to installing the Home Use Middleware and a smart card reader and drivers.

1.2 Terms of Use

The *Home Use Middleware* you are about to install is the property of the United States Air Force (USAF) and is provided for your use on a personal, non-government furnished computer. This product is distributed under licenses restricting its use, duplication, and distribution. It is intended For Official Use Only (FOUO), for accessing Department of Defense (DoD) and USAF Web sites, systems, and networks with the Common Access Card (CAC).

Distribution to non-AF employees is not authorized.

By installing and using this *Home Use Middleware*, you signify your agreement to the terms and conditions as set forth. If you do not agree to this Agreement, do not install or use this product.

1.3 Risks

There are potential risks associated with installing this package. It is not possible to test this middleware with all software, games, and/or applications that are commercially available and that may be on your home computer. Therefore, it is possible that the *Home Use Middleware* could conflict with other applications or software residing on your home computer.

1.4 Disclaimer of Liability

With respect to installing and using *Home Use Middleware*, neither the DoD nor USAF, nor any units or employees within, provide any warranty, expressed or implied, or assume any legal or financial liability or responsibility for your non-government computer system and/or damages or repairs that may result from system incompatibilities with *Home Use Middleware*.

2. Middleware and Reader Installation Instructions

2.1 Required Items

- CAC
- Smart Card Reader (Refer to Table 2-1 for a list of known usable smart card readers)
- System requirements: Windows XP (Professional or Home) with Service Pack 1 or higher, or Windows 2000 with Service Pack 2 or higher; Internet Explorer (Version 6 only); and 27 MB of free disk space. This package will check to see if your computer meets these requirements.
- Hardware requirements: If your computer is running the required operating system (Windows XP or Windows 2000) then your computer has the required hardware.

2.2 Middleware Installation Instructions

Important: Before installation, deactivate your virus scanning software and antispyware! You should disconnect your computer from the Internet prior to deactivating your virus scanning software.

1) If using Windows XP, double click the zip file (pictured here) to open it. (*If using Windows 2000, you will need an unzip tool. You can find numerous free evaluation versions of unzip utilities on the Internet, which come with instructions. You can also consult your local Client Support Administrator (CSA) for assistance. Using an unzip utility in Windows 2000, you will need to unzip the file into a folder of your choice then proceed to Step 10 of the Middleware Installation Instructions).*



2) After double-clicking the zip file, you will notice a folder and two files. One of the files is a batch file used to install or uninstall the middleware. Double click the batch file (pictured here) to begin installing the *Home Use Middleware*.



3) Next, click *Extract all*.



4) Click *Next*.



5) It is suggested that you create a destination for the files to be extracted. With the next prompt, click *Browse*.

Extraction Wizard 🛛 🛛 🗙				
Select a Destination Files inside the ZIP archive will be extracted to the location you choose.				
choose. Select a folder to extract files to. Files will be extracted to this girectory: E:\HOME USE\MW\\0E-07-29-008_HomeUseFile Browse Password Extracting				
	< <u>B</u> ack <u>N</u> ext > Cancel			

6) As a suggestion, you may just want to create a folder on the hard drive (or a drive of your choice). In the next few screenshots, a folder is being created with the name "MW." Click on the drive where you want to create the folder (in this case, Local Disk (C:) Once the drive is highlighted, click *Make New Folder*.

Select a destination.	?×			
Select the place where you want to extract the selected item(s). Then click the OK button.				
🖃 😼 My Computer	^			
🗉 🍶 3½ Floppy (A:)				
🖃 🥯 Local Disk (C:)				
🗉 🚞 CompChecker				
🗉 🚞 Documents and Settings				
🗉 🧰 MSOCache				
🗉 🧰 Program Files				
🗉 🧰 swsetup				
🕀 🧰 temp				
🗉 🚞 WINDOWS				
🗉 🤐 CD Drive (D:)	~			
To view any subfolders, click a plus sign above. <u>Make New Folder</u> OK Cancel				
	:			

7) A new folder will appear, named *New Folder;* change the name to something you can easily recall for the middleware files (in this case, "*MW*" is used). Once you have named the folder, click *OK*.

Select a destination.	Select a destination.
Select the place where you want to extract the selected item(s). Then click the OK button.	Select the place where you want to extract the selected item(s). Then click the OK button.
My Computer My Computer My Computer My Computer Model Disk (C:) CompChecker Documents and Settings MSOCache New Folder Program Files For swsetup for temp for WINDOWS	 My Computer 31/2 Floppy (A:) Local Disk (C:) CompChecker Documents and Settings MSOCache MW Program Files swsetup temp temp WINDOWS
To view any subfolders, click a plus sign above. Make New Folder OK Cancel	To view any subfolders, click a plus sign above. Make New Folder OK Cancel

8) At the next prompt, click *Next* to start the file extraction.

Extraction Wizard	
Select a Destination Files inside the ZI choose.	P archive will be extracted to the location you
	Select a folder to extract files to. Files will be extracted to this <u>directory</u> : C:\MW B <u>r</u> owse Password Extracting
	< <u>B</u> ack <u>N</u> ext > Cancel

9) Once the extraction is complete, ensure a checkmark is in the box for *Show extracted files*, and click *Finish* to see the extracted files and to continue install.

Extraction Wizard				
Extraction Complete Files have been successfully extracted from the ZIP archive.				
Files have been successfully extracted to the following directory: C:\MW To see your extracted files, check the box below: Image: Show extracted files Press finish to continue.				
< <u>B</u> ack Finish Cancel				

10) You will notice a subfolder and two files. One of the files is a batch file used to install or uninstall the middleware. Double click the batch file (pictured here) to install the *Home Use Middleware*. Installation will include the middleware and DoD and External Certification Authority (ECA) Root certificates.



<u>Note:</u> If you receive a pop-up from your virus scanning software, select the appropriate option to permit installation.

11) A black DOS window will appear, indicating install activity. It should automatically disappear during the computer reboot that will follow the middleware installation.



12) You may receive the following prompt if you have not yet installed a smart card reader. If you do, click *OK* and continue installing the middleware.



13) Click *Next* at the ActivCard Gold for CAC – Home Use Version - InstallShield Wizard.



14) Read and acknowledge the User Agreement. Click Next.

🛃 ActivCard Gold for CAC - Home Use Version - InstallShield Wizard 🛛 🛛 🔀			
License Agreement Please read the following license agreement carefully.			
USER AGREEMENT	^		
ACCEPTANCE: Please read the following Terms of Use and Disclaimer carefully before installing and using <i>Home Use</i> <i>Middleware</i> . By installing this package you indicate that you have read the following terms and agree to be bound by and comply with the terms as set forth. If you do not so agree, please promptly exit and do not install the package on your computer.	 Image: A start of the start of		
 [™] have read and understand the User Agreement and hereby accept the conditions of installing and using the Home Use Middleware package I have read and understand the User Agreement. I DO NOT accept the conditions stated and will not install or use this package 			
InstallShield < Back			

15) The InstallShield Wizard will display ActivCard Gold for CAC – PKI selected for installation. Click *Next*.

🛃 ActivCard Gold for CAC - Home Use Version - InstallShield Wizard 🛛 🛛 🔀			
Custom Setup Select the program features you want installed.			
Click on an icon in the list below to change how a feature is ir	nstalled.		
ActivCard Gold for CAC - PKI	Feature Description ActivCard Gold for CAC - PKI		
	This feature requires 512bytes on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 11MB on your hard drive.		
Install to: C:\Program Files\ActivCard\ActivCard Gold\ TextallShield	hange		
Help Space < Back	Next > Cancel		

16) Click Install.

😽 ActivCard Gold for CAC - Home Use Version - InstallShield Wizard 🛛 🛛 🔀
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< <u>B</u> ack Install Cancel

17) A status window will show the progress of installation.

🥵 ActivCard Gold for CAC - Home Use Version - InstallShield Wizard 📃 🗖 🔀			
Installing ActivCard Gold for CAC - Home Use Version The program features you selected are being installed.			
Please wait while the InstallShield Wizard installs ActivCard Gold for CAC - Home Use Version. This may take several minutes. Status:			
InstallShield –	< <u>B</u> ack <u>N</u> ext > Cancel		

18) When the installation is complete click *Finish*.



19) Click *Yes* when prompted to restart your computer to complete the middleware installation.



2.3 Smart Card Reader Installation Instructions

Once the computer has rebooted from the middleware installation, *it is best to shut down the computer before you install a smart card reader*. With the computer turned off, plug in the smart card reader and then start the computer.

If the computer automatically detects and installs the smart card reader drivers, no further action is necessary. Smart card reader drivers already exist on many computers. However, the computer may seek smart card reader drivers via the Internet and provide prompts to install them when found.

If the computer did not detect and install the smart card reader, accomplish the installation using instructions and smart card reader drivers that should have come with the smart card reader when purchased. If you do not have instructions (or smart card reader drivers), you may be able to obtain them from the smart card reader vendor's Web site or via an Internet search. If you obtained the card reader from a military source, and do not have installation instructions or drivers, consult your Client Support Administrator (CSA).

Reboot your computer after installing the smart card reader drivers.

2.4 Smart Card Reader Information

Table 2-1 is a compatibility matrix of middleware (ActivCard Gold 3.0) with various common smart card readers. It also contains links to Web sites that provide additional information. There are many sources from which to purchase smart card readers (local and online retailers, and online auctions).

			Desl	ctop	Lap	top
Smart Card Reader	Vendor Web Site Links	Reader Type	WIN 2000 Pro	WIN XP Pro	WIN 2000 Pro	WIN XP Pro
Schlumberger Reflex 20 PCMCIA	www.readers.slb.com	PCMCIA	x	x	*	*
Schlumberger Reflex USB	www.readers.slb.com	USB	*	*	*	*
SCM SCR 201 PCMCIA	http://www.scmmicro.com/security/secure_card.html	PCMCIA	*	>	*	*
SCM SCR 331 USB	http://www.scmmicro.com/security/secure_card.html	USB	1	*	*	
SCM SCR111 Serial	http://www.scmmicro.com/security/secure_card.html	Serial	1	>	1	1
SCM SCR301 USB	http://www.scmmicro.com/security/secure_card.html	USB	*	1	*	1
GoldTouch Keyboard USB	http://www.keyovation.com/	USB	*	X	*	*
Infineer LT4000 PCMCIA	http://www.mako-tech.com/pands/reader_sol.cfm	PCMCIA	X	×	*	*
Dell D600 Laptop with O2Micro	www.dell.com	PCMCIA	X	X	*	*
ActivCard Serial Reader	http://www.actividentity.com/en/products/4_3_2_readers.ph p	Serial	*	*	4	*

Table 2-1. Smart Card Readers

*	Tested OK
x	Failed

2.5 Additional Information About Smart Card Readers

USB smart card readers are the preferred smart card readers for both Windows 2000 and Windows XP workstations.

PCMCIA smart card readers work on most Windows 2000 and Windows XP laptops; however, many laptops have only one PCMCIA slot, often already used for other purposes such as a wireless local area network (LAN) card. A USB smart card reader is often a better choice even for laptops.

Serial smart card readers operate on Windows 2000 and Windows XP workstations. For the middleware to function properly, the serial smart card readers need to be installed on a COM port. While serial smart card readers can function on most new equipment, they are typically powered by tapping into the keyboard cable connector.

Most smart card readers will function properly with ActivCard Gold Version 3.0.

The following list reflects companies/vendors that sell smart card readers; this list is not all-inclusive. The AF does not recommend one over another.

• SCM SCR (USB and PCMCIA) smart card readers:

Envoy Data Corp. www.smart-cardsys.com

<u>Tx Systems</u> <u>www.txsystems.com</u>

Secure HQ www.securehq.com

CDW www.cdw.com

• Cherry (USB) smart card readers:

Newark 1N One or GTSI www.newark.com

CDW www.cdw.com

2.6 Verify Installation Success

After your computer has rebooted, insert your CAC into the smart card reader. Double click the *ActivCard Gold* icon located in the system tray (lower right-hand corner of the desktop).



The following window indicates you successfully accessed your CAC.

🗞 ActivCard Gold Utilities	? 🗙
<u>Fi</u> le T <u>o</u> ols <u>H</u> elp	
Smart Card Content Troubleshooting Demographic Data	1
My Card PIN ⊮ - ☐ Digital Certificates	
<u></u> <u>Pro</u>	perties
	Close

3. Uninstall Instructions

3.1 Uninstall Home Use Middleware

The following instructions explain how to uninstall the *Home Use Middleware* from your computer. There are two options to uninstall the middleware. The first option is to use *Add/Remove Programs* on the *Control Panel*.

1) Click the *Start* button. (Note: If you are using Windows 2000 or the classic view, you will need to click on *Settings* after clicking the *Start* button.)



2) Click *Control Panel* from the menu.

Internet Internet Explorer	🕑 My Documents
F-mail	📁 My Recent Documents 🔸
Microsoft Office Outlook	🔌 My Pictures
Microsoft Office PowerPoint 2003	📂 My Music
Windows Media Player	😏 My Computer
	🧐 My Network Places
Tour Windows XP	Control Panel
Windows Movie Maker	Set Program Access and Defaults
Files and Settings Transfer Wizard	Printers and Faxes
Microsoft Office Word 2003	🕐 Help and Support
	<u> </u>
All Programs 🕨	7 <u>R</u> un
	🖉 Log Off 🛛 🗿 Shut Down
🐉 Start 📗 🙆 Inbox - Microsoft Out	:look 🛛 🙆 MnR
All Programs Start	Help and Support Search Run Log Off O Shut Down

3) Click Add or Remove Programs.



4) Select *Remove a Program*, or *Add or Remove Programs*. When the list depicting the programs installed on your computer appears, highlight the *ActivCard Gold for CAC Home Use Version* program, and click *Remove*.



5) Click *Yes* to remove the program.



6) Windows will then provide a progress indicator, reflecting that the middleware is being uninstalled.

ActivCard Gold for CAC - Home Use Version
Please wait while Windows configures ActivCard Gold for CAC - Home Use Version
Gathering required information
Cancel

7) Reboot your computer when prompted; click *Yes* at the following prompt.

ActivCard Gold for CAC - Home Use Version	\mathbf{X}
You must restart your system for the configuration changes made to ActivCard Gold for CAC - Home Use Version to take effect. Click Yes to restart now or No if you plan to restart later.	
Yes No	

Rather than use the *Add/Remove Programs* on the *Control Panel*, you can go to the folder where the middleware files are located...in this case, C:/MW was the folder created during the unzip file extraction.

8) Double click the batch file (pictured here) to uninstall the *Home Use Middleware*.



9) Click *Next* when the InstallShield Wizard prompt appears.



10) Select *Remove* and click *Next*.

🔂 ActivCard G	old for CAC - Home Use Version - InstallShield Wizard 🛛 🛛 🔀
Program Main Modify, repair,	tenance , or remove the program.
○ <u>M</u> odify	Change which program features are installed. This option displays the Custom Selection dialog in which you can change the way features are installed.
O Regair	Repair installation errors in the program. This option fixes missing or corrupt files, shortcuts, and registry entries.
	Remove ActivCard Gold for CAC - Home Use Version from your computer.
InstallShield ———	< <u>B</u> ack <u>N</u> ext > Cancel

11) Click *Remove*.

🔀 ActivCard Gold for CAC - Home Use Version - InstallShield Wizard 🛛 🛛 🔀
Remove the Program You have chosen to remove the program from your system.
Click Remove to remove ActivCard Gold for CAC - Home Use Version from your computer. After removal, this program will no longer be available for use.
If you want to review or change any settings, click Back.
InstellShield < <u>Back Remove Cancel</u>

12) You will notice an uninstall indicator.



13) Once the uninstall is complete, you will receive a *Finish* prompt. Click *Finish*.



14) You will then receive a prompt to restart your computer, to complete the uninstall. Click *Yes*.



3.2 Removal of DoD Root Certificates

During installation, *Home Use Middleware* also installed DoD root certificates on your computer. These certificates are necessary to use the PKI. However, when you uninstall *Home Use Middleware*, the DoD root certificates remain. Leaving these certificates on the computer does not cause any problems; however, to remove them, follow these instructions.

- 1) Open Internet Explorer.
- 2) Open *Tools*, and then click *Internet Options*.

3) Select the *Content* tab, click on the *Certificates* button.

Internet Options
General Security Privacy Content Connections Programs Advanced
Content Advisor
Ratings help you control the Internet content that can be viewed on this computer.
Enable Settings
Certificates
Use certificates to positively identify yourself, certification authorities, and publishers.
Clear <u>S</u> SL State <u>C</u> ertificates Pu <u>b</u> lishers
Personal information
AutoComplete stores previous entries and suggests matches for you.
Microsoft Profile Assistant stores your My P <u>r</u> ofile personal information.
OK Cancel Apply

4) This area is the "Certificate Store" and contains several types of certificates used with your computer and its applications/programs. There are several tabs at the top of the certificate store. Select the *Intermediate Certification Authorities* tab. Highlight the certificates that start with "**DOD**" and click the *Remove* button.

Certificates			?	×
Intended purpose: <a>			•	~
Intermediate Certification Authoritie	irusted Root Certificat	ion Authorities	Trusted Publ	>
Issued To	Issued By	Expiratio	Friendly Nam 🛆	
🔤 DOD CLASS 3 CA-7	DoD CLASS 3 Root CA	6/2/2009	<none></none>	
🕮 DOD CLASS 3 CA-9	DoD CLASS 3 Root CA	6/8/2009	<none></none>	
🔤 DOD CLASS 3 EMAIL CA-10	DoD CLASS 3 Root CA	6/8/2009	<none></none>	
🔤 DOD CLASS 3 EMAIL CA-5	DoD CLASS 3 Root CA	3/18/2009	<none></none>	
🔤 DOD CLASS 3 EMAIL CA-6	DoD CLASS 3 Root CA	4/7/2009	<none></none>	
🔤 DOD CLASS 3 EMAIL CA-7	DoD CLASS 3 Root CA	6/8/2009	<none></none>	
🔤 DOD CLASS 3 EMAIL CA-9	DoD CLASS 3 Root CA	6/8/2009	<none></none>	
📟 GlobalSign Root CA	Root SGC Authority	1/28/2014	<none> 🗸</none>	
<			>	
Import Export	Remove		Advanced	

5) When you click *Remove*, you will see the following prompt, click *Yes*.



6) Next, select the two ECA Root CA certificates. Scroll down to the two certificates (ORC ECA and VeriSign Client External Certification Authority), highlight them, and click the Remove button. DO NOT SELECT OR REMOVE ANY OTHER CERTIFICATES on this tab.

Certificates			1	
I <u>n</u> tended purpose:	<ali></ali>			~
Personal Other Peopl	le Intermediate Certification Au	uthorities rus	ted Root Certification	• •
Issued To	Issued By	Expiratio	Friendly Name	•
🖾 ORC ECA	ECA Root CA	6/15/2010	<none></none>	
Root Agency	Root Agency	12/31/2039	<none></none>	
SecureNet CA SG	C Root SGC Authority	10/16/2009	<none></none>	
Thawte Premium	Se Root SGC Authority	7/16/2004	<none></none>	
Thawte Server C	A Root SGC Authority	7/16/2004	<none></none>	
UTN - DATACorp	SGC Root SGC Authority	6/24/2019	<none></none>	
VeriSign Class 1 (EA Class 1 Public Primary	5/12/2008	<none></none>	
VeriSign Class 2 (EA Class 2 Public Primary	1/6/2004	<none></none>	
🚟 VeriSign Client Ex	te ECA Root CA	6/29/2011	<none></none>	~
Import Exp	ort		Advanced	i
			⊻iew	
			⊆lose	

7) Click *Yes* at the following prompt.



8) Next, select the *Trusted Root Certification Authorities* tab. Scroll down to the *DoD Class Root CA*, the *DoD PKI Med Root CA* the *DoD Root CA 2* and *ECA Root CA* certificates. Highlight these certificates only. DO NOT SELECT OR REMOVE ANY OTHER CERTIFICATES. Click the *Remove* button.

Certificates				? ×
I <u>n</u> tended purpose: <	\ll>			~
Intermediate Certification	Authorities Trusted Root C	ertification Aut	horities rusted Put	
Issued To	Issued By	Expiratio	Friendly Name	
Deutsche Telekom Deutsche Telekom DoD CLASS 3 Root DoD PKI Med Root DoD Root CA 2 DST (ANX Network) DST (NRF) RootCA DST (UPS) RootCA DST RootCA X1	 Deutsche Telekom Ro Deutsche Telekom Ro DoD CLASS 3 Root CA DoD PKI Med Root CA DoD Root CA 2 DST (ANX Network) CA DST (NRF) RootCA DST (UPS) RootCA DST RootCA X1 	7/9/2019 7/9/2019 5/14/2020 8/7/2008 12/5/2029 12/9/2018 12/8/2008 12/6/2008 11/28/2008	Deutsche Teleko Deutsche Teleko <none> <none> DST (ANX Netwo DST (National Re DST (United Parc DST RootCA X1</none></none>	
Import Export	<u>R</u> emove		Advan View	ced

Certificates				?×
I <u>n</u> tended purpose: <	All>			*
Intermediate Certificatio	n Authoritie: Trusted Root C	ertification Aut	horities Trusted Pu	
Issued To	Issued By	Expiratio	Friendly Name	
DST RootCA X2	DST RootCA X2 DSTCA E1	11/27/2008 12/10/2018	DST RootCA X2 DSTCA E1	
DSTCA E2	DSTCA E2 A DST-Entrust GTLCA	12/9/2018	DSTCA E2 DST-Entrust GTL	
ECA Root CA	ECA Root CA	6/14/2040	<none></none>	
Entrust.net Secure	Entrust.net Secure Se	5/25/2019	Entrust.net Secu	
Equifax Secure Cer	Equifax Secure Certifi	8/22/2018	Equifax Secure	
Equifax Secure eBu	J Equifax Secure eBusin J Equifax Secure eBusin	6/23/2019	Equifax Secure e Equifax Secure e	~
Import Expor	t <u>R</u> emove		Advar	
<ali></ali>			<u>V</u> iew	
				se

9) When you click *Remove*, you will see the following prompt, click *Yes*.

Certific	cates 🛛 🕅
⚠	Deleting system root certificates might prevent some Windows components from working properly. If Update Root Certificates is installed, any deleted third-party root certificates will be restored automatically, but the system root certificates will not. Do you want to delete the selected certificate(s)?

10) You have successfully removed the DoD root certificates. Click *Close*.