
**Defense Manpower Data Center
Common Access Card
Application Programming Interface**

**Prepared for The
Office of the Under Secretary of Defense
(Personnel and Readiness)
And
Defense Manpower Data Center
February 2001**

DoD Contract GS-35F-0323J
Task Order TO 800BN1074
Project K00BN018S00

Table of Contents

1	Background	1
2	Purpose	1
3	Future Modifications	2
4	Retrieving DEERS Data from the CAC.....	2
4.1	Person Instance.....	2
4.2	Personnel Instance	4
4.3	Benefits Instance	5
4.4	Other Benefits Instance	6
4.5	Utilities	7
4.6	Error Handler	8
Appendix A	Interfaces	
Appendix B	Personnel Category Codes	
Appendix C	Pay Plan Codes	
Appendix D	Rank Codes	
Appendix E	Personnel Entitlement Condition Type Codes	
Appendix F	U.S. Government Agency/Subagency Codes	
Appendix G	DDDS U.S. Government Agency/Subagency Codes	
Appendix H	Error Codes	

1 Background

The Real-time Automated Personnel Identification System (RAPIDS) was established in 1981 to develop and implement a new, more secure identification (ID) card system. RAPIDS is a rule-based system that allows users to create, modify, and use personnel information stored in the Defense Enrollment Eligibility Reporting System (DEERS) database to provide ID cards and related personnel support to persons who are eligible for Uniformed Services benefits. RAPIDS ensures the provision of timely vital information by permitting real-time, online query and update capabilities to DEERS personnel records. The installed network of RAPIDS workstations allows service personnel officers to quickly verify an applicant's eligibility for benefits through the DEERS database, register new applicants, and enter changes to existing DEERS data.

In a November 1999 memorandum, Deputy Secretary of Defense John Hamre directed all Department of Defense (DoD) components to take necessary actions to implement the use of smart card and public key infrastructure (PKI) technology. A smart card is the size of a credit card and contains an integrated circuit (IC) chip used to store a moderate amount of data. PKI is a system that uses digital certificates, certificate authorities, and other registration authorities to verify and authenticate the validity of each party involved in an Internet transaction.

Since RAPIDS has in place the infrastructure needed to complete this task, DoD chose it to be the system used to produce the new DoD ID card. The DoD Common Access Card (CAC) will employ both smart card and PKI technology.

2 Purpose

The purpose of this document is to describe a set of Application Programming Interfaces (APIs) that were written as read-only operations to retrieve the DEERS data from the CAC.

The Defense Manpower Data Center (DMDC) CAC API specification is wrapped around the Government Smart Card Basic Services Interface (BSI). The BSI is a set of APIs covering the basic services that government smart cards are required, by the General Services Administration (GSA), to interoperate. For more information on the BSI, see the document "*Government Smart Card, Basic Services Interface, Provider Application Programming Interface Proposal, Draft v1.1.*"

The DMDC CAC API is implemented as a Component Object Model (COM) object. The COM is a component software architecture that allows applications and systems to be built from components supplied by different software vendors. COM is the underlying architecture that forms the foundation for higher-level software services.

3 Future Modifications

This DMDC CAC API is a work in progress. As a result, there are features not yet available which will be required at a later date in order to use the Common Access Card.

4 Retrieving DEERS Data from the CAC

DEERS data is stored on the CAC in four instances of a Generic Container Applet. The Generic Container Applet is a JavaCard 2.1 applet that manages a secure data storage area on the CAC. The data storage area is protected by a set of access control rules. Each instance of the Generic Container Applet manages a logical grouping of DEERS data as well as a unique set of access control rules. The four instances are:

- Person Instance
- Personnel Instance
- Benefits Instance
- Other Benefits Instance

Note: The interfaces used to access the data in these instances are listed in each of the following sections and also described in detail in Appendix A. Appendices B through H contain the codes stored on the CAC and their meaning.

4.1 Person Instance

The Person Instance contains information relating to the person who owns the card. The application identifier (AID) of this instance is A0000000790200. The table below shows the fields, tags, and the maximum size of the values contained by the instance. The Value Size column indicates the length of the value in hexadecimal representation. For example, a value of “ABC” will be stored as “414243” in the instance.

Field	Tag	Value Size
Person First Name	01	40
Person Middle Name	02	40
Person Last Name	03	52
Person Cadency Name	04	8
Person Identifier	05	30
Date of Birth	06	16

Field	Tag	Value Size
Sex Category Code	07	2
Person Identifier Type Code	08	2
Blood Type Code	11	4
DoD EDI Person Identifier	17	20
Organ Donor	18	2
Identification Card Issue Date	62	16
Identification Card Expiration Date	63	16
Date Demographic Data was Loaded on Chip	65	16
Date Demographic Data on Chip Expires	66	16
Card Instance Identifier	67	2

The following is a list of interfaces that can be used to access the data in the Person instance. They are described in detail in Appendix A.

- `getFirstName()`
Retrieves the first name of the cardholder.
- `getMiddleName()`
Retrieves the middle name of the cardholder.
- `getLastName()`
Retrieves the last name of the cardholder.
- `getCadency()`
Retrieves the suffix name of the cardholder.
- `getPersonIdentifier()`
Retrieves the person identifier (e.g. SSN) of the cardholder.
- `getDateOfBirth()`
Retrieves the date of birth of the cardholder.
- `getGender()`
Retrieves the gender of the cardholder.

- `getPersonIdentifierType()`
Retrieves the type of person identifier of the cardholder.
- `getBloodType()`
Retrieves the blood type code for the cardholder.
- `getPersonDoDEDI()`
Retrieves the Department of Defense Electronic Data Interchange (EDI) number for the cardholder.
- `getOrganDonor()`
Retrieves the organ donor code for the cardholder.
- `getCardIssueDate()`
Retrieves the date the card was issued.
- `getCardExpireDate()`
Retrieves the expiration date of the card.
- `getDateCacDataLoaded()`
Retrieves the date the data was loaded on the CAC.
- `getDateCacDataExpires()`
Retrieves the date the data on the CAC expires.

4.2 Benefits Instance

The Benefits Instance contains information relating to the benefits the cardholder is entitled to. The AID of this instance is A0000000790202. The table below shows the fields, tags, and the maximum size of the values contained by the instance. The Value Size column indicates the length of the value in hexadecimal representation. For example, a value of “ABC” will be stored as “414243” in the instance.

Field	Tag	Value Size
Exchange Code	12	2
Commissary Code	13	2
MWR Code	14	2
Non-Medical Benefits Association End Date	1B	16

Field	Tag	Value Size
Direct Care End Date	1C	16
Civilian Health Care Entitlement Type Code	D0	2
Direct Care Benefit Type Code	D1	2
Civilian Health Care End Date	D2	16

The following is a list of interfaces that can be used to access the data in the Benefits instance. They are described in detail in Appendix A.

- `getExchangeCode()`
Retrieves the exchange code for the cardholder.
- `getCommissaryCode()`
Retrieves the commissary code for the cardholder.
- `getMWRCode()`
Retrieves the Morale, Welfare and Recreation (MWR) code for the cardholder.
- `getNonMedicalBenefitsEndDate()`
Retrieves the non-medical benefits end date for the cardholder.
- `getDirectCareEndDate()`
Retrieves the medical benefits end date for the cardholder.
- `getCHCCode()`
Retrieves the civilian health care code for the cardholder.
- `getDirectCareCode()`
Retrieves the direct care code for the cardholder.
- `getCHCEndDate()`
Retrieves the medical benefits end date for the cardholder.

4.3 Other Benefits Instance

The Other Benefits Instance contains information relating to other benefits the cardholder is entitled to. The AID of this instance is A0000000790203. The table below shows the fields, tags, and the maximum size of the values contained by the instance. The Value

Size column indicates the length of the value in hexadecimal representation. For example, a value of “ABC” will be stored as “414243” in the instance.

Field	Tag	Value Size
Meal Plan Type Code	1A	4

The following interface can be used to access the data in the Other Benefits Instance. It is described in detail in Appendix A.

- `getMealPlanCode()`
Retrieves the meal plan code for the cardholder.

4.4 Personnel Instance

The Personnel Instance contains information relating to the employment of the cardholder. The AID of this instance is A0000000790201. The table below shows the fields, tags, and the maximum size of the values contained by the instance. The Value Size column indicates the length of the value in hexadecimal representation. For example, a value of “ABC” will be stored as “414243” in the instance.

Field	Tag	Value Size
DoD Contractor Function Code	19	2
US Government Agency/Subagency Code	20	8
Branch of Service Code	24	2
Pay Grade Code	25	4
Rank Code	26	12
Personnel Category Code	34	2
Non-US Government Agency/Subagency Code	35	4
Pay Plan Code	36	4
Personnel Entitlement Condition Code	D3	4

The following is a list of interfaces that can be used to access the data in the Personnel instance. They are described in detail in Appendix A.

- `getDoDContractorFunctionCode()`
Retrieves the DoD Contractor Function Code for the cardholder.
- `getUSGovernmentAgencyCode()`
Retrieves the U. S. Government agency code for the cardholder.
- `getBranchOfService()`
Retrieves the branch of service for the cardholder.
- `getPayGradeCode()`
Retrieves the pay grade code for the cardholder.
- `getRankCode()`
Retrieves the rank code for the cardholder.
- `getPersonnelCategoryCode()`
Retrieves the personnel category code for the cardholder.
- `getNonUSGovernmentAgencyCode()`
Retrieves the non-U. S. Government agency code for the cardholder.
- `getPayPlanCode()`
Retrieves the pay plan code for the cardholder.
- `getPersonnelEntitlementConditionType()`
Retrieves the personnel entitlement condition type code for the cardholder.

4.5 Utilities

The following is a list of interfaces that can be used to initialize and terminate communication with the CAC. They are described in greater detail in Appendix A.

- `connectToCard()`
Connects to the card, using the reader name the card is inserted in.
- `disconnectFromCard()`
Disconnects from the card.
- `getCardHandle()`
Gets the handle to the card.
- `getCardStatus()`
Gets the status of the card.

- `logoffFromCard()`
Logs off of the card.
- `logonToCard()`
Logs on to the card.

4.6 Error Handler

The following interface can be used to access error message generated by the API. This interface is described in greater detail in Appendix A.

- `getErrorMsg()`
Retrieves a given error number's corresponding error message.

Appendix A Interfaces

Descriptive detail about each of the following Application Programming Interfaces (APIs) is contained in this appendix.

connectToCard()	getFirstName()
disconnectFromCard()	getGenderCode()
getBloodTypeCode()	getGenderDDDSCode()
getBloodTypeDDDSCode()	getGenderDesc()
getBloodTypeDesc()	getLastName()
getBranchOfServiceCode()	getMealPlanCode()
getBranchOfServiceDDDSCode()	getMiddleName()
getBranchOfServiceDesc()	getMWRCode()
getCadency()	getMWRCodeDesc()
getCardExpirationDate()	getNonMedicalBenefitsEndDate()
getCardHandle()	getNonUSGovernmentAgencyCode()
getCardIssueDate()	getOrganDonorCode()
getCardStatus()	getOrganDonorDDDSCode ()
getCHCCode()	getOrganDonorDesc()
getCHCDesc()	getPayGrade()
getCHCEndDate()	getPayPlan()
getCommissaryCode()	getPersonDoDEDI()
getCommissaryCodeDesc()	getPersonIdentifier()
getDateCacDataExpires()	getPersonIdentifierTypeCode()
getDateCacDataLoaded()	getPersonIdentifierTypeDDDSCode()
getDateOfBirth()	getPersonIdentifierTypeDesc()
getDirectCareCode()	getPersonnelCategoryCode()
getDirectCareDDDSCode()	getPersonnelCategoryDDDSCode()
getDirectCareDesc()	getPersonnelCategoryDesc()
getDirectCareEndDate ()	getPersonnelEntitlementConditionTypeCode()
getDoDContractorFunctionCode ()	getPersonnelEntitlementConditionTypeDesc()
getDoDContractorFunctionDesc ()	getRank()
getExchangeCode()	getUSGovernmentAgencyCode()
getExchangeCodeDesc()	getUSGovernmentAgencyDDDSCode()
getErrorMsg()	getUSGovernmentAgencyDesc()

logoffFromCard()
logonToCard()

connectToCard()

Prototype	long	connectToCard (IN BSTR <i>readerName</i> , IN long <i>readerNameLen</i>);
Description		Connect to the card, inserted into a specific reader.
Parameters		<i>readerName</i> : input parameter Name of the reader where the card is inserted. The reader name may be NULL, in which case, the user has to choose among a list of configured readers, if several are available. <i>readerNameLen</i> : input parameter Length of the reader name in bytes.
Return Codes	BSI_OK BSI_BAD_PARAM BSI_UNKNOWN_READER	Connection successful Bad parameter The given reader is not in reader's database.
Comments		This should be done before any other call to the card.

disconnectFromCard()

Prototype	long	disconnectFromCard ();
Description	Disconnect from the card. This should be done after you have finished using the card.	
Parameters	None.	
Return Codes	BSI_OK	Successful function.
	BSI_BAD_HANDLE	Unknown card handle.
Comments	None.	

getBloodTypeCode()

Prototype	long	getBloodTypeCode (OUT BSTR *value);
Description	Retrieve the blood type code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• 1 - A+• 2 - A-• 3 - B+• 4 - B-• 5 - AB+• 6 - AB-• 7 - O+• 8 - O-• 9 - Unknown	

getBloodTypeDDDSCode()

Prototype	long getBloodTypeDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR * <i>value</i>);												
Description	Retrieve the DDDS blood type code for the cardholder.												
Parameters	<p><i>deersCode</i> : input parameter</p> <p>The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.</p> <p><i>value</i> : output parameter</p> <p>A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.</p>												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• 62 - A+• 06 - A-• 73 - B+• 17 - B-• 84 - AB+• 28 - AB-• 95 - O+• 51 - O-												

getBloodTypeDesc()

Prototype	long getBloodTypeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);												
Description	Retrieve the description of the blood type code for the cardholder.												
Parameters	<p><i>code</i> : input parameter</p> <p>The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.</p> <p><i>value</i> : output parameter</p> <p>A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.</p>												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• 1 - A+• 2 - A-• 3 - B+• 4 - B-• 5 - AB+• 6 - AB-• 7 - O+• 8 - O-• 9 - Unknown												

getBranchOfServiceCode()

Prototype	long getBranchOfServiceCode (OUT BSTR * <i>value</i>);												
Description	Retrieve the code for the branch of service the cardholder is a member of.												
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• 1 - Foreign Army• 2 - Foreign Navy• 3 - Foreign Marine Corps• 4 - Foreign Air Force• A - Army• C - Coast Guard• D - Department of Defense• F - Air Force• H - Public Health Service• M - Marine Corps• N - Navy• O - National Oceanic and Atmospheric Administration• X - Other												

getBranchOfServiceDDDSCode()

Prototype	long getBranchOfServiceDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR * <i>value</i>);												
Description	Retrieve the DDDS code for the branch of service the cardholder is a member of.												
Parameters	<p><i>deersCode</i> : input parameter</p> <p>The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.</p> <p><i>value</i> : output parameter</p> <p>A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.</p>												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• A - Army• C - Coast Guard• H - Air Force• M - Public Health Service• N - Navy• O - National Oceanic and Atmospheric Administration												

getBranchOfServiceDesc()

Prototype	long getBranchOfServiceDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);												
Description	Retrieve the description of the branch of service the cardholder is a member of.												
Parameters	<p><i>code</i> : input parameter</p> <p>The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.</p> <p><i>value</i> : output parameter</p> <p>A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.</p>												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• 1 - Foreign Army• 2 - Foreign Navy• 3 - Foreign Marine Corps• 4 - Foreign Air Force• A - Army• C - Coast Guard• D - Department of Defense• F - Air Force• H - Public Health Service• M - Marine Corps												

- N - Navy
- O - National Oceanic and Atmospheric Administration
- X - Other

getCadency()

Prototype	long getCadency (OUT BSTR * <i>value</i>);												
Description	Retrieve the suffix name (e.g. Jr, Sr, II, III, etc) of the cardholder.												
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	The cadency is a maximum of 4 bytes on the Common Access Card (CAC).												

getCardExpirationDate()

Prototype	long	getCardExpirationDate (OUT BSTR * <i>value</i>);
Description	Retrieve the expiration date of the card.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getCardHandle ()

Prototype long getCardHandle ();

Description Retrieves the handle to the card.

Parameters

Return Codes

Comments The card handle is used by all of the other functions to communicate with the smart card..

getCardIssueDate()

Prototype	long	getCardIssueDate (OUT BSTR * <i>value</i>);
Description	Retrieve the date the card was issued.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getCardStatus ()

Prototype	long	getCardStatus (IN BSTR * <i>readerName</i> , IN long <i>readerNameLen</i>);
Description		Retrieves the card status. If a reader name and length are supplied, this function will retrieve the status for card in the designated reader. If the reader name is NULL, the status of the currently connected card is retrieved.
Parameters		<i>readerName</i> : input parameter Name of the reader where the card is inserted. <i>readerNameLen</i> : input parameter Length of the reader name in bytes.
Return Codes	BSI_OK BSI_CARD_REMOVED BSI_CARD_PRESENT BSI_CARD_ABSENT	A connected card present. Card removed. A card is in the reader. There is no card in the reader.
Comments		None.

getCHCCode()

Prototype	long	getCHCCode (OUT BSTR * <i>value</i>);
Description	Retrieve the civilian health care (CHC) code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• F - Outpatient Only - Reimbursable• M - CHAMPUS• N - None	

getCHCDesc()

Prototype	long	getCHCDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the civilian health care (CHC) for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• F - Outpatient Only - Reimbursable• M - CHAMPUS• N - None	

getCHCEndDate()

Prototype	long	getCHCEndDate (OUT BSTR * <i>value</i>);
Description	Retrieve the civilian health care end date for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getCommissaryCode()

Prototype	long	getCommissaryCode (OUT BSTR * <i>value</i>);
Description	Retrieve the commissary code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N - Not eligible for commissary privileges.• X - Eligible for commissary privileges, but the privileges were removed by a verifying officer.• Y - Eligible for and has commissary privileges.	

getCommissaryCodeDesc()

Prototype	long	getCommissaryCodeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the commissary code for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N – No• X – Suspended• Y – Yes	

getDateCacDataExpires()

Prototype	long	getDateCacDataExpires (OUT BSTR * <i>value</i>);
Description	Retrieve the date the data on the CAC expires.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getDateCacDataLoaded()

Prototype	long	getDateCacDataLoaded (OUT BSTR * <i>value</i>);
Description	Retrieve the date the data was loaded on the CAC.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getDateOfBirth()

Prototype	long	getDateOfBirth (OUT BSTR * <i>value</i>);
Description	Retrieve the date of birth of the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getDirectCareCode()

Prototype	long	getDirectCareCode (OUT BSTR * <i>value</i>);
Description	Retrieve the direct care code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• D - Outpatient care within the national capital region (NCR) fees waived; outpatient care outside NCR and all inpatient care at interagency rate.• F - Outpatient at no charge and inpatient care at full reimbursable rate.• N - Not eligible for direct care privileges.• O - Outpatient Only.• P - Outpatient Only – Reimbursable.• R - Space available – Reimbursable direct care.• S - Eligible for inpatient and outpatient care at no cost to the patient at a military treatment facility.• X - Eligible for direct care privileges, but the privileges were removed by a verifying officer.	

getDirectCareDDDSCode()

Prototype	long	getDirectCareDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR <i>*value</i>);
Description		Retrieve the DDDS direct care code for the cardholder.
Parameters	<i>deersCode</i> : input parameter	The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.
	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments		The following is the valid code for this operation and its associated description. <ul style="list-style-type: none">• A - Eligible for inpatient and outpatient care at no cost to the patient at a military treatment facility.

getDirectCareDesc()

Prototype	long	getDirectCareDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the direct care for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• D - National Capital Region• F - Outpatient No Charge - Inpatient Reimbursable• N - Not eligible for direct care privileges• O - Outpatient Only• P - Outpatient Only – Reimbursable• R - Space Available - Reimbursable• S - Military Treatment Facility Direct Care• X - Suspended	

getDirectCareEndDate()

Prototype	long	getDirectCareEndDate (OUT BSTR * <i>value</i>);
Description	Retrieve the direct care end date for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getDoDContractorFunctionCode()

Prototype	long	getDoDContractorFunctionCode (OUT BSTR * <i>value</i>);
Description	Retrieve the DoD contractor function code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• 01 - Contract Surgeon• 02 - Member of United Seaman's Service• 03 - National Oceanic and Atmospheric Administration Civilian Shipboard Officer• 04 - National Oceanic and Atmospheric Administration Civilian Shipboard Crewman• 99 - All Other contract positions	

getDoDContractorFunctionDesc()

Prototype	long	getDoDContractorFunctionDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the DoD contractor function code for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• 01 - Contract Surgeon• 02 - Member of United Seaman's Service• 03 - NOAA Civilian Shipboard Officer• 04 - NOAA Civilian Shipboard Crewman• 99 - Other	

getExchangeCode()

Prototype	long	getExchangeCode (OUT BSTR * <i>value</i>);
Description	Retrieve the exchange code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• L - Eligible for and has limited exchange privileges.• N - Not eligible for exchange privileges.• U - Eligible for and has unlimited exchange privileges.• X - Eligible for exchange privileges, but the privileges were removed by a verifying official.	

getExchangeCodeDesc()

Prototype	long	getExchangeCodeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve description of the exchange code for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• L – Limited• N – No• U – Unlimited• X – Suspended	

getErrorMsg()

Prototype	long getErrorMsg (IN long <i>errorCode</i> , OUT BSTR * <i>errorMsg</i>);
Description	Retrieve a formatted error message for the corresponding error code.
Parameters	<i>errorCode</i> : input parameter An error code generated by this API. <i>errorMsg</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	None.
Comments	See “Appendix H – Error Codes” for a list of the error codes and their associated description.

getFirstName()

Prototype	long	getFirstName (OUT BSTR * <i>value</i>);
Description	Retrieve the first name of the cardholder.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The first name is a maximum of 20 bytes on the Common Access Card (CAC).	

getGenderCode()

Prototype	long	getGenderCode (OUT BSTR * <i>value</i>);
Description	Retrieve the code for the gender of the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• F - Female• M - Male• Z - Unknown	

getGenderDDDSCode()

Prototype	long	getGenderDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR <i>*value</i>);
Description	Retrieve the DDDS code for the gender of the cardholder.	
Parameters	<i>deersCode</i> : input parameter The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• 2 - Female• 1 - Male• 9 - Unknown	

getGenderDesc()

Prototype	long	getGenderDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description for the gender of the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• F - Female• M - Male• Z - Unknown	

getLastName()

Prototype	long	getLastName (OUT BSTR * <i>value</i>);
Description	Retrieve the last name (surname) of the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The last name is a maximum of 26 bytes on the Common Access Card (CAC).	

getMealPlanCode()

Prototype	long	getMealPlanCode (OUT BSTR * <i>value</i>);
Description	Retrieve the meal plan code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The meal plan code is a two byte field on the CAC.	

getMiddleName()

Prototype	long	getMiddleName (OUT BSTR * <i>value</i>);
Description	Retrieve the middle name of the cardholder.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The middle name is a maximum of 20 bytes on the Common Access Card (CAC).	

getMWRCode()

Prototype	long	getMWRCode (OUT BSTR * <i>value</i>);
Description	Retrieve the morale, welfare, and recreation (MWR) code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N - Not eligible for morale, welfare, and recreation privileges.• X - Eligible for morale, welfare, and recreation privileges, but the privileges were removed by a verifying official.• Y - Eligible for and has morale, welfare, and recreation privileges.	

getMWRCodeDesc()

Prototype	long	getMWRCodeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the morale, welfare, and recreation (MWR) code for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N – No• X – Suspended• Y – Yes	

getNonMedicalBenefitsEndDate()

Prototype	long	getNonMedicalBenefitsEndDate (OUT BSTR * <i>value</i>);
Description	Retrieve the non-medical benefits end date for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	Dates are 8 bytes on the Common Access Card (CAC) in the format YYYYMMDD.	

getNonUSGovernmentAgencyCode()

Prototype	long	getNonUSGovernmentAgencyCode (OUT BSTR * <i>value</i>);
Description	Retrieve the non-U.S. Government agency code for the cardholder.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• NV33 - Military Sealift Command• ZZ99 - Unlisted NonDOD Government Agency	

getNonUSGovernmentAgencyDesc()

Prototype	long	getNonUSGovernmentAgencyDesc (IN BSTR <i>code</i> , OUT BSTR <i>*value</i>);
Description	Retrieve the description of the non-U.S. Government agency for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• NV33 – Military Sealift Command• ZZ99 – Other	

getOrganDonorCode()

Prototype	long	getOrganDonorCode (OUT BSTR *value);
Description	Retrieve the organ donor code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N - The person is not an organ donor.• Y - The person is an organ donor.• Z - Organ donor status unknown.	

getOrganDonorDDDSCode()

Prototype	long	getOrganDonorDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the DDDS organ donor code for the cardholder.	
Parameters	<i>deersCode</i> : input parameter The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N - The person is not an organ donor.• Y - The person is an organ donor.• Z - Organ donor status unknown.	

getOrganDonorDesc()

Prototype	long	getOrganDonorDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the organ donor code for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• N – No• Y – Yes• Z – Unknown	

getPayGrade()

Prototype	long	getPayGrade (OUT BSTR * <i>value</i>);
Description	Retrieve the pay grade for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• 00 – Unknown• 00 – ZZ (not WW) - Used when pay plan is civil service.• 01 - Used when pay plan is cadet.• 01 – 05 - Used when pay plan is warrant officer.• 01 – 09 - Used when pay plan is enlisted.• 01 – 11 - Used when pay plan is officer.	

getPayPlan()

Prototype	long	getPayPlan (OUT BSTR *value);
Description	Retrieve the pay plan for the cardholder.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix C – Pay Plan Codes” for a list of the valid codes for this operation and their associated description.	

getPersonDoDEDI()

Prototype	long	getPersonDoDEDI (OUT BSTR * <i>value</i>);
Description	Retrieve the Department of Defense Electronic Data Interchange (EDI) number for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The person identifier is a maximum of 10 bytes on the Common Access Card (CAC).	

getPersonIdentifier()

Prototype	long	getPersonIdentifier (OUT BSTR * <i>value</i>);
Description	Retrieve the person identifier of the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The person identifier is a maximum of 10 bytes on the Common Access Card (CAC).	

getPersonIdentifierTypeCode()

Prototype	long	getPersonIdentifierTypeCode (OUT BSTR * <i>value</i>);
Description	Retrieve the code for the type of person identifier for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• D - Temporary Identification Number• F - Foreign Identification Number• N - Invalid SSN• P - Service Number• S - Social Security Number• T - Test Identification Number• X - RAPIDS Generated Identifier	

getPersonIdentifierTypeDDDSCode()

Prototype	long	getPersonIdentifierTypeDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR <i>*value</i>);
Description	Retrieve the DDDS code for the type of person identifier for the cardholder.	
Parameters	<i>deersCode</i> : input parameter The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• I - Foreign Identification Number• S - Social Security Number	

getPersonIdentifierTypeDesc()

Prototype	long	getPersonIdentifierTypeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the type of person identifier for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• D – Temporary• F – Foreign• N – Invalid SSN• P – Service #• S – SSN• T – Test• X – Generated #	

getPersonnelCategoryCode()

Prototype	long	getPersonnelCategoryCode (OUT BSTR * <i>value</i>);
Description	Retrieve the code of the personnel category for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix B – Personnel Category Codes” for a list of the valid codes for this operation and their associated description.	

getPersonnelCategoryDDDSCode()

Prototype	long getPersonnelCategoryDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR * <i>value</i>);												
Description	Retrieve the DDDS code of the personnel category for the cardholder.												
Parameters	<p><i>deersCode</i> : input parameter</p> <p>The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it.</p> <p><i>value</i> : output parameter</p> <p>A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.</p>												
Return Codes	<table><tr><td>BSI_OK</td><td>Read successful.</td></tr><tr><td>BSI_BAD_HANDLE</td><td>Unknown card handle.</td></tr><tr><td>BSI_BAD_AID</td><td>There is no container for this ID.</td></tr><tr><td>BSI_BAD_TAG</td><td>This GC instance does not manage a data item of this Tag.</td></tr><tr><td>BSI_BAD_AUTH</td><td>Provided authentication value (or type) is incorrect.</td></tr><tr><td>BSI_ACCESS_DENIED</td><td>The Access Control Rule was not fulfilled. The access to the data item is rejected.</td></tr></table>	BSI_OK	Read successful.	BSI_BAD_HANDLE	Unknown card handle.	BSI_BAD_AID	There is no container for this ID.	BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.	BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.
BSI_OK	Read successful.												
BSI_BAD_HANDLE	Unknown card handle.												
BSI_BAD_AID	There is no container for this ID.												
BSI_BAD_TAG	This GC instance does not manage a data item of this Tag.												
BSI_BAD_AUTH	Provided authentication value (or type) is incorrect.												
BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the data item is rejected.												
Comments	<p>The following is a list of the valid codes for this operation and their associated description.</p> <ul style="list-style-type: none">• A – Active Duty• C – DoD Civil Service• B – DoD Non-Appropriated Fund Employees• B – National Guard• G – Retired• A – Foreign National Employee• B – Reserve												

getPersonnelCategoryDesc()

Prototype	long	getPersonnelCategoryDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description of the personnel category for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix B – Personnel Category Codes” for a list of the valid codes for this operation and their associated description.	

getPersonnelEntitlementConditionTypeCode()

Prototype	long	getPersonnelEntitlementConditionTypeCode (OUT BSTR * <i>value</i>);
Description	Retrieve the code for the personnel entitlement condition type for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix E – Personnel Entitlement Condition Type Codes” for a list of the valid codes for this operation and their associated description.	

getPersonnelEntitlementConditionTypeDesc()

Prototype	long	getPersonnelEntitlementConditionTypeDesc (IN BSTR <i>code</i> , OUT BSTR * <i>value</i>);
Description	Retrieve the description for the personnel entitlement condition type for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix E – Personnel Entitlement Condition Type Codes” for a list of the valid codes for this operation and their associated description.	

getRank()

Prototype	long	getRank (OUT BSTR * <i>value</i>);
Description	Retrieve the rank of the cardholder.	
Parameters	<i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix D – Rank Codes” for a list of the valid codes for this operation and their associated description.	

getUSGovernmentAgencyCode()

Prototype	long	getUSGovernmentAgencyCode (OUT BSTR * <i>value</i>);
Description	Retrieve the U.S. Government agency/subagency code for the cardholder.	
Parameters	<i>value</i> : output parameter	A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix F – U.S. Government Agency/Subagency Codes” for a list of the valid codes for this operation and their associated description.	

getUSGovernmentAgencyDDDSCode()

Prototype	long	getUSGovernmentAgencyDDDSCode (IN BSTR <i>deersCode</i> , OUT BSTR <i>*value</i>);
Description	Retrieve the DDDS U.S. Government agency/subagency code for the cardholder.	
Parameters	<i>deersCode</i> : input parameter The DEERS code to be converted to a DDDS code. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	See “Appendix G – DDDS U.S. Government Agency/Subagency Codes” for a list of the valid codes for this operation and their associated description.	

getUSGovernmentAgencyDesc()

Prototype	long	getUSGovernmentAgencyDesc (IN BSTR <i>code</i> , OUT BSTR <i>*value</i>);
Description	Retrieve the description of the U.S. Government agency for the cardholder.	
Parameters	<i>code</i> : input parameter The DEERS code to be used to retrieve the description. The code is retrieved from the CAC in a previous call. The code may be NULL to have the method read the code from the CAC before converting it. <i>value</i> : output parameter A pointer to the result of the operation. The memory to store the value read by the function must be allocated by the caller.	
Return Codes	BSI_OK BSI_BAD_HANDLE BSI_BAD_AID BSI_BAD_TAG BSI_BAD_AUTH BSI_ACCESS_DENIED	Read successful. Unknown card handle. There is no container for this ID. This GC instance does not manage a data item of this Tag. Provided authentication value (or type) is incorrect. The Access Control Rule was not fulfilled. The access to the data item is rejected.
Comments	The following is a list of the valid codes for this operation and their associated description. <ul style="list-style-type: none">• NV33 – Military Sealift Command• ZZ99 – Other	

logoffFromCard ()

Prototype	long	logoffFromCard ();
Description	Log off the card.	
Parameters	None.	
Return Codes	BSI_OK BSI_BAD_PARAM	Logoff successful.
Comments	None.	

logonToCard ()

Prototype	long	logonToCard (IN BSTR * <i>pin</i> , IN long <i>pinLen</i>);
Description		Log on to the card.
Parameters	<i>pin</i> : input parameter	A pointer to the PIN needed to log on to the card.
	<i>pinLen</i> : input parameter	Length of the pin.
Return Codes	BSI_OK	Log on successful.
	BSI_BAD_PARAM	A bad parameter was passed in.
	BSI_ACCESS_DENIED	The Access Control Rule was not fulfilled. The access to the card is rejected.
Comments		This function needs to be called after a successful call to connectToCard() and before any attempt to read data from the CAC.

Appendix B Personnel Category Codes

Code	Description	Meaning
A	Active Duty	A member of a component of the Uniformed Services on full-time active service.
B	Presidential Appointee	A Presidential Appointee who has been confirmed by the Senate.
C	DoD Civil Service	A government service civilian employee employed by an agency of the Department of Defense (DoD).
D	Disabled American Veteran	An American veteran that has been medically diagnosed as disabled as a result of service connected injuries or illness.
E	DoD Contractor	A civilian contractor employed, by contract, with the Department of Defense (DoD).
F	Former Member	A former Service member who served at least 20 creditable years for retirement but elected separation in lieu of retirement.
H	Medal of Honor	A current or former Service member who was awarded the Medal of Honor for courage in combat.
I	Other Government Agency Employees	A government service civilian employee employed with a U.S. Government agency, not the Department of Defense.
J	Academy Student	A student enrolled in the Service academies. This does not include Officer Candidate School, or Merchant Marine Academy.
K	DoD Non-Appropriated Fund Employees	A government service employee employed by a Non-Appropriated Fund agency of the Department of Defense (DoD).
L	Lighthouse Service	Designated members of the former Lighthouse Service.
M	Non-Government Agency Personnel	A civilian employed with a non-government agency, e.g. American Red Cross.
N	National Guard	Service members of one of the affiliated state-operated military service bureaus.
O	Other Government Agency Contractors	A civilian contractor employed, by contract, with a U.S. Government agency, not the Department of Defense.
Q	Reserve Retiree	A Guard/Reserve member with at least 20 satisfactory years who is eligible to receive retired pay at age 60th birthday (Grey Area).
R	Retired	A Service member who has completed 20 qualifying years of service and is drawing retired pay.
T	Foreign Military	Service members from a country other than the U.S.
U	Foreign National Employee	A Foreign National citizen employed in any capacity by a U.S. Government agency in a country other than the U.S.
V	Reserve	A Service member in a Selected Reserve (SelRes) or Individual Ready Reserve (IRR) status.

Appendix C Pay Plan Codes

Code	Description
AD	Administratively determined not elsewhere specified
AF	American Family Members
AJ	Administrative judges, Nuclear Regulatory Commission
AL	Administrative Law judges
BB	Non supervisory negotiated pay employees
BL	Leader negotiated pay employees
BP	Printing and Lithographic negotiated pay employees
BS	Supervisory negotiated pay employees
CA	Board of contract appeals
CC	Commissioned Corps of Public Health Service
CE	Contract education
CG	Corporate graded Federal Deposit Insurance Corp.
CP	Compensation program Office of the Comptroller of the currency
CS	Skill Based Pay demonstration employees, DLA
CU	Credit Union employees
CY	Contract education Bureau of Indian Affairs
CZ	Canal Area General Schedule type positions
DA	Demonstration administrative Director of Laboratory Programs(Navy)
DG	Demonstration general Director of Laboratory Programs(Navy)
DH	Demonstration hourly Air Force logistics command
DN	Defense Nuclear facilities safety board
DP	Demonstration professional Director of Laboratory Programs(Navy)
DS	Demonstration specialist Director of Laboratory Programs(Navy)
DT	Demonstration technician Director of Laboratory Programs(Navy)
DW	Demonstration salaried Air Force and DLA
DX	Demonstration Supervisory Air Force and DLA
EA	Administrative schedule (excluded) Tennessee Valley Authority
EB	Clerical schedule (excluded) Tennessee Valley Authority
EC	Engineering and Computing schedule (excluded) Tennessee Valley Authority
ED	Expert
EE	Expert (other)
EF	Consultant
EG	Consultant (other)
EH	Advisory committee member
EI	Advisory committee member (other)
EM	Executive schedule Office of the Comptroller of the currency

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
EO	FDIC executive pay
EP	Defense Intelligence Senior Executive Service
ES	Senior Executive Service (SES)
ET	General Accounting Office Senior Executive Service
EX	Executive pay
FA	Foreign Service Chiefs of Mission
FC	Foreign compensation Agency for International Development
FD	Foreign defense
FE	Senior Foreign Service
FO	Foreign Service Officers
FP	Foreign Service personnel
FZ	Consular Agent Department of State
GD	Skill based pay demonstration project managers (DLA)
GG	Grades similar to General Schedule
GH	GG employees converted to performance and management recognition system
GM	Performance Management and Recognition system
GN	Nurse at Warren G. Magnuson Clinical Center
GS	General Schedule
GW	Employment under schedule A paid at GS rate Stay-In-School program
JG	Graded tradesmen and craftsmen United States Courts
JL	Leaders of tradesmen and craftsmen United States Courts
JP	Non supervisory lithographers and printers United States Courts
JQ	Lead lithographers and printers United States Courts
JR	Supervisory lithographers and printers United States Courts
JT	Supervisors for tradesmen and craftsmen United States Courts
KA	Kleas Act Government Printing Office
KG	Non-Craft non supervisory Bureau of Engraving and Printing
KL	Non-Craft leader Bureau of Engraving and Printing
KS	Non-Craft supervisory Bureau of Engraving and Printing
LE	United States Secret Service uniformed division Treasury
LG	Liquidation graded FDIC
MA	Milk Marketing Department of Agriculture
MC	Cadet
ME	Enlisted
MO	Officer
MW	Warrant officer
NA	Non appropriated funds, non supervisory, non leader Federal Wage System
NS	Non appropriated funds, supervisory, Federal Wage System
OC	Office of the Comptroller of the Currency

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
PA	Attorneys and law clerks General Accounting Office
PE	Evaluator and evaluator related General Accounting Office
PG	Printing Office grades
RS	Senior Biomedical Service
SA	Administrative schedule Tennessee Valley Authority
SB	Clerical schedule (excluded) Tennessee Valley Authority
SC	Engineering and Computing schedule Tennessee Valley Authority
SD	Scientific and Programming schedule Tennessee Valley Authority
SE	Aide and Technician schedule Tennessee Valley Authority
SF	Custodial schedule Tennessee Valley Authority
SG	Public Safety schedule Tennessee Valley Authority
SH	Physicians schedule Tennessee Valley Authority
SJ	Scientific and Programming schedule (excluded) Tennessee Valley Authority
SL	Senior Level Positions
SM	Management Schedule Tennessee Valley Authority
SN	Senior Level System Nuclear Regulatory Commission
SP	Park Police Department of the Interior
SR	Statutory rates not elsewhere specified
SS	Senior Staff positions
ST	Scientific and professional
SZ	Canal Area Special category type positions
TA	Construction schedule
TB	Operating and Maintenance (power facilities) Tennessee Valley Authority
TC	Chemical Operators Tennessee Valley Authority
TD	Plant Operators schedule Tennessee Valley Authority
TE	Operating and Maintenance (nonpower facilities) Tennessee Valley Authority
TM	Federal Housing Finance board Executive level
TP	Teaching positions DoD schools only
TR	Police Forces US Mint and Bureau of Engraving and Printing
TS	Step System Federal Housing Finance board
VC	Canteen Service Department of Veterans Affairs
VG	Clerical and Administrative support Farm Credit
VH	Professional, Administrative, and Managerial Farm Credit
VM	Medical and Dental Department of Veterans Affairs
VN	Nurses Department of Veterans Affairs
VP	Clinical Podiatrists and Optometrists Department of Veterans Affairs
WA	Navigation Lock and Dam Operation and maintenance Supervisory USACE
WB	Wage positions under Federal Wage System otherwise not designated
WD	Production facilitating non supervisory Federal Wage System

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
WE	Currency manufacturing Department of the Treasury
WG	Non supervisory pay schedule Federal Wage System
WJ	Hopper Dredge Schedule Supervisory Federal Wage System Dept of Army
WK	Hopper Dredge Schedule non supervisory Federal Wage System Dept of Army
WL	Leader pay schedules Federal Wage System
WM	Maritime pay schedules
WN	Production facilitating supervisory Federal Wage System
WO	Navigation Lock and Dam Operation and maintenance leader USACE
WQ	Aircraft Electronic Equipment and Optical Inst. repair supervisory
WR	Aircraft Electronic Equipment and Optical Inst. repair leader
WS	Supervisor Federal Wage System
WT	Apprentices and Shop trainees Federal Wage System
WU	Aircraft Electronic Equipment and Optical Inst. repair non supervisory
WW	Wage type excepted Stay-In-School Federal Wage System
WY	Navigation Lock and Dam Operation and maintenance non supervisory USACE
WZ	Canal Area Wage System type positions
XA	Special Overlap Area Rate Schedule non supervisory Dept of the Interior
XB	Special Overlap Area Rate Schedule leader Dept of the Interior
XC	Special Overlap Area Rate Schedule supervisory Dept of the Interior
XD	Non supervisory production facilitating special schedule printing employees
XF	Floating Plant Schedule non supervisory Dept of Army
XG	Floating Plant Schedule leader Dept of Army
XH	Floating Plant Schedule supervisory Dept of Army
XL	Leader special schedule printing employees
XN	Supervisory production facilitating special schedule printing employees
XP	Non supervisory special schedule printing employees
XS	Supervisory special schedule printing employees
YV	Temporary summer aid employment
YW	Student aid employment Stay-In-School
ZA	Administrative National Institute of Standards and Technology
ZP	Scientific and Engineering Professional National Institute of Standards and Technology
ZS	Administrative Support National Institute of Standards and Technology
ZT	Scientific and Engineering Technician National Institute of Standards and Technology
ZZ	Not applicable (use only with pay basis without compensation when others N/A)

Appendix D Rank Codes

Service	Pay Plan	Pay Grade	Rank Code	Description
A	MC	01	CADET	Cadet
A	MC	01	OC	Officer Candidate
A	MC	01	ROTC	Reserve Officer Training Corps
C	MC	01	AOC	Aviation Officer Candidate
C	MC	01	MIDSHP	Midshipman
C	MC	01	OC	Officer Candidate
C	MC	01	ROTC	Reserve Officer Training Corps
F	MC	01	AOC	Aviation Officer Candidate
F	MC	01	CADET	Cadet
F	MC	01	OC	Officer Candidate
F	MC	01	ROTC	Reserve Officer Training Corps
N	MC	01	AOC	Aviation Officer Candidate
N	MC	01	MIDSHP	Midshipman
N	MC	01	OC	Officer Candidate
N	MC	01	ROTC	Reserve Officer Training Corps
M	MC	01	OC	Officer Candidate
M	MC	01	ROTC	Reserve Officer Training Corps
1	ME	02	PTE	Private
1	ME	01	PTE	Private
1	ME	03	LCPL	Lance Corporal
1	ME	04	CPL	Corporal
1	ME	05	SGT	Sergeant
1	ME	06	SGT	Sergeant
1	ME	07	SSGT	Staff Sergeant
1	ME	08	WO1	Warrant Officer Class 2
1	ME	09	WO2	Warrant Officer Class 1
2	ME	01	ORD	Ordinary
2	ME	03	AB	AB
2	ME	04	LH	Leading Hand
2	ME	05	PO	Petty Officer
2	ME	06	PO	Petty Officer
2	ME	07	CPO	Chief Petty Officer
2	ME	08	CPO	Chief Petty Officer
2	ME	09	WO	Warrant Officer
3	ME	02	PTE	Private
3	ME	01	PTE	Private

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
3	ME	03	LCPL	Lance Corporal
3	ME	04	CPL	Corporal
3	ME	05	SGT	Sergeant
3	ME	06	SGT	Sergeant
3	ME	07	SSGT	Colour Sergeant
3	ME	08	WO1	Warrant Officer Class 2
3	ME	09	WO2	Warrant Officer Class 1
4	ME	01	AC	Aircraftsman
4	ME	02	LAC	Leading Aircraftsman
4	ME	03	SAC	Senior Aircraftsman
4	ME	04	CPL	Corporal
4	ME	05	SGT	Sergeant
4	ME	06	SGT	Sergeant
4	ME	07	FLTSGT	Flight Sergeant
4	ME	08	FLTSGT	Flight Sergeant
4	ME	09	WO	Warrant Officer
A	ME	01	PV1	Private (no insignia)
A	ME	02	PV2	Private
A	ME	03	PFC	Private First Class
A	ME	04	CPL	Corporal
A	ME	04	SP4	Specialist 4
A	ME	04	SPC	Specialist
A	ME	05	SGT	Sergeant
A	ME	05	SP5	Specialist 5
A	ME	06	SP6	Specialist 6
A	ME	06	SSG	Staff Sergeant
A	ME	08	1SG	First Sergeant
A	ME	08	MSG	Master Sergeant
A	ME	09	SGM	Sergeant Major
A	ME	09	SMA	Sergeant Major of the Army
C	ME	01	SR	Seaman Recruit
C	ME	02	SA	Seaman Apprentice
C	ME	03	SN	Seaman
C	ME	04	PO3	Petty Officer Third Class
C	ME	05	PO2	Petty Officer Second Class
C	ME	06	PO1	Petty Officer First Class
C	ME	07	CPO	Chief Petty Officer
C	ME	08	SCPO	Senior Chief Petty Officer
C	ME	09	MCPO	Master Chief Petty Officer

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
C	ME	09	MCPOCG	Master Chief Petty Officer of the Coast Guard
F	ME	01	AB	Airman Basic
F	ME	02	AMN	Airman
F	ME	03	A1C	Airman First Class
F	ME	04	SGT	Sergeant
F	ME	04	SRA	Senior Airman
F	ME	05	SSGT	Staff Sergeant
F	ME	06	TSGT	Technical Sergeant
F	ME	07	MSGT	Master Sergeant
F	ME	08	SMSGT	Senior Master Sergeant
F	ME	09	CMSAF	Chief Master Sergeant of the Air Force
F	ME	09	CMSGT	Chief Master Sergeant
M	ME	02	PVT	Private First Class
M	ME	01	PFC	Private (no insignia)
M	ME	03	LCPL	Lance Corporal
M	ME	04	CPL	Corporal
M	ME	05	SGT	Sergeant
M	ME	06	SSGT	Staff Sergeant
M	ME	07	GYSGT	Gunnery Sergeant
M	ME	08	1STSGT	First Sergeant
M	ME	08	MSGT	Master Sergeant
M	ME	09	MGYSGT	Master Gunnery Sergeant
M	ME	09	SGTMAJ	Sergeant Major
M	ME	09	SMOFMC	Sergeant Major of the Marine Corps
N	ME	01	SR	Seaman Recruit
N	ME	02	SA	Seaman Apprentice
N	ME	03	SN	Seaman
N	ME	04	PO3	Petty Officer Third Class
N	ME	05	PO2	Petty Officer Second Class
N	ME	06	PO1	Petty Officer First Class
N	ME	07	CPO	Chief Petty Officer
N	ME	08	SCPO	Senior Chief Petty Officer
N	ME	09	MCPO	Master Chief Petty Officer
N	ME	09	MCPON	Master Chief Petty Officer of the Navy
2	ME	02	AB	AB
A	ME	07	SFC	Sergeant First Class
A	ME	07	PSG	Platoon Sergeant
A	ME	09	CSM	Command Sergeant Major

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
A	ME	07	SP7	Specialist 7
A	ME	07	MSG	Master Sergeant
A	ME	08	SP8	Specialist 8
A	ME	09	SP9	Specialist 9
A	ME	07	SSG	Staff Sergeant
A	ME	06	SFC	Sergeant First Class
1	MO	01	2LT	Second Lieutenant
1	MO	02	LT	Lieutenant
1	MO	03	CAPT	Captain
1	MO	04	MAJ	Major
1	MO	05	LTCOL	Lieutenant Colonel
1	MO	06	COL	Colonel
1	MO	07	BRIG	Brigadier
1	MO	08	MAJGEN	Major General
1	MO	09	LTGEN	Lieutenant General
1	MO	10	GEN	General
2	MO	02	SLT	Sub Lieutenant
2	MO	03	LT	Lieutenant
2	MO	04	LTCDR	Lieutenant Commander
2	MO	05	CDR	Commander
2	MO	06	CAPT	Captain
2	MO	07	CMDR	Commodore
2	MO	08	RADM	Rear Admiral
2	MO	09	VADM	Vice Admiral
2	MO	10	ADM	Admiral
3	MO	01	2LT	Second Lieutenant
3	MO	02	LT	Lieutenant
3	MO	03	CAPT	Captain
3	MO	04	MAJ	Major
3	MO	05	LTCOL	Lieutenant Colonel
3	MO	06	COL	Colonel
3	MO	07	BRIG	Brigadier
3	MO	08	MAJGEN	Major General
3	MO	09	LTGEN	Lieutenant General
3	MO	10	GEN	General
4	MO	01	PLTOFF	Pilot Officer
4	MO	02	FLGOFF	Flying Officer
4	MO	04	SGNLDR	Squadron Leader
4	MO	05	WGCDR	Wing Commander

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
4	MO	06	GPCAPT	Group Captain
4	MO	07	ACOMDR	Air Commodore
4	MO	08	AVM	Air Vice Marshal
4	MO	09	AMSHL	Air Marshal
4	MO	10	ACMSHL	Air Chief Marshal
4	MO	03	FLTLT	Flight Lieutenant
A	MO	01	2LT	Second Lieutenant
A	MO	02	1LT	First Lieutenant
A	MO	03	CPT	Captain
A	MO	04	MAJ	Major
A	MO	05	LTC	Lieutenant Colonel
A	MO	06	COL	Colonel
A	MO	07	BG	Brigadier General
A	MO	08	MG	Major General
A	MO	09	LTG	Lieutenant General
A	MO	10	GEN	General
C	MO	01	ENS	Ensign
C	MO	02	LTJG	Lieutenant Junior Grade
C	MO	03	LT	Lieutenant
C	MO	04	LCDR	Lieutenant Commander
C	MO	05	CDR	Commander
C	MO	06	CAPT	Captain
C	MO	07	RADM	Rear Admiral
C	MO	08	RADM	Rear Admiral
C	MO	09	VADM	Vice Admiral
C	MO	10	ADM	Admiral
F	MO	01	2NDLT	Second Lieutenant
F	MO	02	1STLT	First Lieutenant
F	MO	03	CAPT	Captain
F	MO	04	MAJ	Major
F	MO	05	LTCOL	Lieutenant Colonel
F	MO	06	COL	Colonel
F	MO	07	BGEN	Brigadier General
F	MO	08	MAJGEN	Major General
F	MO	09	LTGEN	Lieutenant General
F	MO	10	GEN	General
M	MO	01	2NDLT	Second Lieutenant
M	MO	02	1STLT	First Lieutenant
M	MO	03	CAPT	Captain

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
M	MO	04	MAJ	Major
M	MO	05	LTCOL	Lieutenant Colonel
M	MO	06	COL	Colonel
M	MO	07	BGEN	Brigadier General
M	MO	08	MAJGEN	Major General
M	MO	09	LTGEN	Lieutenant General
M	MO	10	GEN	General
N	MO	01	ENS	Ensign
N	MO	02	LTJG	Lieutenant Junior Grade
N	MO	03	LT	Lieutenant
N	MO	04	LCDR	Lieutenant Commander
N	MO	05	CDR	Commander
N	MO	06	CAPT	Captain
N	MO	07	RADM	Rear Admiral
N	MO	08	RADM	Rear Admiral
N	MO	09	VADM	Vice Admiral
N	MO	10	ADM	Admiral
H	MO	01	ENS	Ensign
H	MO	02	LTJG	Lieutenant Junior Grade
H	MO	03	LT	Lieutenant
H	MO	04	LCDR	Lieutenant Commander
H	MO	05	CDR	Commander
H	MO	06	CAPT	Captain
H	MO	07	RADM	Rear Admiral
H	MO	08	RADM	Rear Admiral
H	MO	09	VADM	Vice Admiral
H	MO	10	ADM	Admiral
O	MO	01	ENS	Ensign
O	MO	02	LTJG	Lieutenant Junior Grade
O	MO	03	LT	Lieutenant
O	MO	04	LCDR	Lieutenant Commander
O	MO	05	CDR	Commander
O	MO	06	CAPT	Captain
O	MO	07	RADM	Rear Admiral
O	MO	08	RADM	Rear Admiral
O	MO	09	VADM	Vice Admiral
O	MO	10	ADM	Admiral
X	MO		N/A	Not Applicable
A	MW	01	WO1	Warrant Officer

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Service	Pay Plan	Pay Grade	Rank Code	Description
A	MW	02	CW2	Chief Warrant Officer 2
A	MW	03	CW3	Chief Warrant Officer 3
A	MW	04	CW4	Chief Warrant Officer 4
A	MW	05	CW5	Chief Warrant Officer 5
C	MW	01	WO-1	Warrant Officer
C	MW	02	CWO-2	Chief Warrant Officer 2
C	MW	03	CWO-3	Chief Warrant Officer 3
C	MW	04	CWO-4	Chief Warrant Officer 4
C	MW	05	CWO-5	Chief Warrant Officer 5
F	MW	01	WO	Warrant Officer
F	MW	02	CWO-2	Chief Warrant Officer 2
F	MW	03	CWO-3	Chief Warrant Officer 3
F	MW	04	CWO-4	Chief Warrant Officer 4
M	MW	01	WO	Warrant Officer
M	MW	02	CWO2	Chief Warrant Officer 2
M	MW	03	CWO3	Chief Warrant Officer 3
M	MW	04	CWO4	Chief Warrant Officer 4
M	MW	05	CWO5	Chief Warrant Officer 5
N	MW	01	WO-1	Warrant Officer
N	MW	02	CWO-2	Chief Warrant Officer 2
N	MW	03	CWO-3	Chief Warrant Officer 3
N	MW	04	CWO-4	Chief Warrant Officer 4
N	MW	05	CWO-5	Chief Warrant Officer 5
A	MW	04	MW4	Master Warrant Officer

Appendix E Personnel Entitlement Condition Type Codes

Code	Description	Meaning
01	On Active Duty	Guard/Reserve or Retiree who has gone on active duty
02	Activation for Special Operation	Guard/Reserve who has been activated for a special operation
03	Appellate Leave	Sponsor has been sent home to await appellate review of a punitive charge
04	Military Prisoner	Serving a prison sentence as a result of being convicted at a court-martial
05	POW/MIA	Classified as a Prisoner of War or Missing in Action
06	Sep. from Sel. Reserve	Separated from Selective Reserve
07	PDRL after TDRL	Declared permanently disabled after temporary disability period
08	Non-CONUS Assignment	On Assignment outside of the continental United States
09	Living in Guam or Puerto Rico	On Assignment in Guam or Puerto Rico
10	Living in Quarters	Living on base and not drawing a basic allowance for quarters
11	Death while Active	Death was related to active duty or training or while traveling to or from a place of performance
12	Transition Compensation w/Ret.	Transition Compensation, sponsor is eligible for retirement.
13	Retired Pay	Awarded retired pay at age 60
14	DoD Sponsored in US	Foreign Military personnel CONUS under sponsorship of DoD.
15	DoD Non-sponsored in US	Foreign Military personnel CONUS not sponsored by DoD.
16	DoD Sponsored Overseas	Foreign Military personnel serving OCONUS under sponsorship of DoD.
18	Transition Compensation w/o Ret.	Transition Compensation, sponsor is ineligible for retirement.
20	TA-30	Receiving 30 days of transitional assistance
21	TA-Res	Receiving Reserve transitional assistance as a result of a reduction in force
22	TA-60	Receiving 60 days of transitional assistance
23	TA-120	Receiving 120 days of transitional assistance
24	TA-SSB	Receiving Special Separation Benefit payment
25	TA-VSI	Receiving Voluntary Separation Incentive income
26	TA-Composite	Receiving a combination of two types of transitional assistance
28	Emergency Essential - overseas only	On Assignment outside of the continental US serving in an Emergency Essential capacity.
29	Emergency Essential - CONUS	Stationed CONUS and serving in an Emergency Essential capacity.
30	Emergency Essential - CONUS living in quarters	Living on base and not drawing a basic allowance for quarters, serving in an Emergency Essential capacity.

Appendix F U.S. Government Agency/Subagency Codes

Code	Description
AF01	Air Force Management Engineering Agency
AF02	Air Force Inspection and Safety Center
AF03	Air Force Operational Test and Evaluation Center
AF04	Air Force Communications Agency
AF05	Air Force Intelligence Service
AF06	Air Force Audit Agency
AF07	Air Force Office of Special Investigations
AF08	Air Force Office of Security Police
AF09	Air Force Personnel Center
AF0B	U.S. Air Force Academy
AF0D	U.S. Air Forces, Europe
AF0I	Air Reserve Personnel Center
AF0J	Air Training Command
AF0K	Air University
AF0M	Headquarters, Air Force Reserve
AF0N	Immediate Office, Headquarters, USAF
AF0R	Pacific Air Forces
AF0U	Electronic Security Command
AF0Y	Air Force Communications Command
AF10	Air Force Center for Quality and Management Innovation
AF1C	Air Combat Command
AF1G	Air Force Logistics Management Agency
AF1L	Air Mobility Command
AF1M	Air Force Materiel Command
AF1Q	HQ AF Flight Standards Agency
AF1S	Space Command
AF1W	Air Force Engineering and Services Center
AF27	Air Force Agency for Modeling and Simulation
AF28	Air Force Communication and Information Center
AF29	Air Force National Security Emergency Preparedness
AF2A	Air Force Cost Center
AF2B	Air Force Doctrine Center
AF2C	Air Force Civilian Personnel Management Center
AF2D	Air Force Personnel Operations Agency

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
AF2E	Air Force Legal Services Center
AF2F	Air Force Medical Services Center
AF2G	Air Force Service Information and News Center
AF2H	Air Force Combat Operations Staff
AF2I	Air National Guard Support Center
AF2K	U.S. Air Force Historical Research Center
AF2L	Air Force Technical Applications Center
AF2M	Air Force Review Boards Office
AF2N	Air Force Center for Studies and Analyses
AF2P	Air Force Center for International Programs
AF2Q	Air Weather Service
AF2R	Air Force Program Executive Office
AF2S	HQ NORAD
AF2T	Air Force Supply Center
AF2U	Air Force Morale, Welfare and Recreation Center
AF2V	Air Force Disposal Agency
AF2W	Air Force District of Washington
AF2X	Air Force Real Estate Agency
AF2Y	Air Force Pentagon Communications Agency
AF2Z	HQ Air Force Medical Operations Agency
AF34	Air National Guard Units (Mobilization) (Title 5)
AF3C	Air Force Elements, U.S. Central Command
AF3D	Air Force Elements, U.S. Special Operations Command
AF3G	Air Force Elements, Europe
AF3I	Reservist, Centrally Managed
AF3L	Center for Air Force History
AF3M	Air Force Elements, U.S. Southern Command
AF3N	Air Force Elements, U.S. Atlantic Command
AF3O	Air Force Elements, U.S. Pacific Command
AF3Q	Air Force Elements, U.S. Strategic Command
AF3R	Air Force Elements, U.S. Readiness Command
AF3S	Headquarters, U.S. Space Command and NORAD
AF3T	Air Force Elements, U.S. Transportation Command
AF3V	Air Force Elements, Other than Europe
AF3W	Air Force Center for Environmental Excellence
AF3Y	Air Force Frequency Management Center
AF3Z	Joint Services Survival, Evasion, Resistance and Escape Agency

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
AF99	DEPARTMENT OF THE AIR FORCE
AFNG	Air National Guard Units (Title 32)
AFZG	U.S. Special Operations Command (ANG, Title 32)
AFZS	U.S. Special Operations Command (Air Force)
AG99	DEPARTMENT OF AGRICULTURE
AR99	DEPARTMENT OF THE ARMY
ARAE	Acquisition Executive Support Agency
ARAS	U.S. Army Intelligence and Security Command
ARAT	U.S. Army Test and Evaluation Command
ARAU	U.S. Army Audit Agency
ARCB	U.S. Army Criminal Investigation Command
ARCD	U.S. Army Corps of Engineers (civil program financing only)
ARCE	U.S. Army Corps of Engineers (except civil program financing)
ARCS	Immediate Office of the Chief of Staff of the Army
ARCZ	U.S. Army Information Systems Command
ARE0	59th Ordnance Brigade
ARE1	Immediate Office of the Commander-in-Chief of the U.S. Army
ARE2	21st Theater Army Area Command
ARE3	U.S. Army Southern European Task Force
ARE5	U.S. Army V Corps
AREB	1st Personnel Command
ARED	U.S. Military Community Activity, Heidelberg
AREN	Seventh Army Training Command
ARFC	U.S. Army Forces Command
ARGB	Office of the Chief of the National Guard Bureau
ARHR	U.S. Army Reserve Command
ARHS	U.S. Army Health Services Command
ARJ1	U.S. Army Element SHAPE
ARJA	Joint Activities
ARMA	U.S. Military Academy
ARMC	U.S. Army Medical Command
ARMD	Surgeon General
ARMP	U.S. Total Army Personnel Command
ARMT	Military Traffic Management Command
ARMW	U.S. Army Military District of Washington
ARNG	Army National Guard Units (Title 32)
ARP1	U.S. Army, Pacific

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
ARP8	Eighth U.S. Army
ARPC	Military Entrance Processing Command
ARRC	U.S. Army Recruiting Command
ARSA	Office of the Secretary of the Army
ARSB	Field Operating Offices of the Office of the Secretary of the Army
ARSC	U.S. Army Space and Strategic Defense Command
ARSE	Field Operating Agencies of the Army Staff Resourced Through OA-22
ARSF	Field Operating Agencies of the Army Staff
ARSJ	Joint Services and Activities Supported by the Office, Secretary of the Army
ARSP	U.S. Special Operations Command (Army)
ARSS	Staff Support Agencies of the Chief of Staff, Army v Office of the Chief of Staff of the Army
ARSU	U.S. Army Southern Command
ARTC	U.S. Army Training and Doctrine Command
ARX2	Headquarters, AMC
ARX3	Headquarters, Staff Support Activities, AMC
ARX4	Training Activities, AMC
ARX5	U.S. Army Materiel Command, All Others
ARX6	U.S. Army Missile Command
ARX7	U.S. Army Tank-Automotive and Armament Command (TACOM)
ARX8	U.S. Army Communications Electronics Command
ARX9	U.S. Army Simulation, Training and Instrumentation Command
ARXA	U.S. Army Chemical and Biological Defense Command
ARXB	U.S. Army Aviation and Troop Command
ARXC	U.S. Army Soldiers System Command (SSC)
ARXD	U.S. Army Research Laboratory Command
ARXK	Materiel Acquisition Activities
ARXL	Materiel Acquisition Project Managers
ARXM	U.S. Army Test and Evaluation Command
ARXP	U.S. Army Security Assistance Command
ARXQ	U.S. Army Industrial Operational Command (IOC)
ARXT	U.S. Army Test, Measurement, and Diagnostic Equipment Activity
ARXX	Materiel Readiness Activities
BO99	Office of Management and Budget
CE99	Council of Economic Advisers
CM99	DEPARTMENT OF COMMERCE
DC99	Office of Policy Development

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
DD01	Office of the Secretary of Defense
DD02	Organization of the Joint Chiefs of Staff
DD04	Defense Information Systems Agency
DD05	Defense Intelligence Agency
DD06	Defense Security Cooperation Agency
DD07	Defense Logistics Agency
DD08	U.S. Court of Appeals for the Armed Forces
DD09	American Forces Information Service
DD10	Defense Contract Audit Agency
DD11	National Imagery and Mapping Agency.
DD12	Defense Security Service
DD13	Defense Advanced Research Projects Agency
DD15	Uniformed Services University of the Health Sciences
DD16	Department of Defense Education Activity
DD17	TRICARE Support Office
DD21	Washington Headquarters Services
DD23	Office of Economics Adjustment
DD25	Defense Legal Services Agency
DD26	Office of Inspector General
DD27	Ballistic Missile Defense Organization
DD28	National Security Agency/Central Security Service
DD34	Defense Commissary Agency
DD35	Defense Finance and Accounting Service
DD36	Army/Air Force Exchange Service.
DD48	Defense Human Resources Activity
DD50	USD(A&T) Defense Support Activity
DD58	Defense Prisoner of War/Missing Personnel Office
DD59	Consolidated Metropolitan Technical Personnel Center
DD60	TRICARE Management Activity
DD61	Defense Threat Reduction Agency
DD62	Defense Career Management and Support Agency
DD99	DEPARTMENT OF DEFENSE
DJ99	DEPARTMENT OF JUSTICE
DL99	DEPARTMENT OF LABOR
DN99	DEPARTMENT OF ENERGY
EC99	Office of Administration
ED99	DEPARTMENT OF EDUCATION

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
EQ99	Council on Environmental Quality/Office of Environmental Quality
GS99	GENERAL SERVICES ADMINISTRATION
HE31	Office of the Assistant Secretary of Health
HE32	Substance Abuse and Mental Health Services Administration
HE33	Agency for Health Care Policy and Research
HE34	Health Resources and Services Administration
HE35	Agency for Toxic Substances and Disease Registry
HE36	Food and Drug Administration
HE37	Indian Health Service
HE38	National Institutes of Health
HE39	Centers for Disease Control and Prevention
HE98	Public Health Service
HE99	DEPARTMENT OF HEALTH AND HUMAN SERVICES
HU99	DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
IN99	DEPARTMENT OF THE INTERIOR
JL01	SUPREME COURT OF THE UNITED STATES
LL01	SENATE.
LL02	HOUSE OF REPRESENTATIVES
NN99	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
NQ99	NATIONAL ARCHIVES AND RECORDS ADMINISTRATION
NS99	National Security Council
NV08	Immediate Office of the Secretary of the Navy
NV09	Navy Staff Offices
NV10	Navy Field Offices
NV11	Immediate Office of the Chief of Naval Operations
NV14	Office of Naval Research
NV15	Naval Intelligence Command
NV18	Naval Medical Command
NV19	Naval Air Systems Command
NV22	Bureau of Naval Personnel
NV23	Naval Supply Systems Command
NV24	Naval Sea Systems Command
NV25	Naval Facilities Engineering Command
NV27	U.S. Marine Corps
NV30	Special Projects Office
NV33	Military Sealift Command
NV39	Naval Space and Warfare Systems Command

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
NV60	U.S. Atlantic Fleet, Commander in Chief
NV61	U.S. Naval Forces, Europe
NV62	Naval Education and Training Command
NV63	Naval Air Systems Command
NV65	Naval Oceanography Command
NV69	Naval Security Group Command
NV70	U.S. Pacific Fleet, Commander in Chief
NV72	Naval Reserve Force
NV74	Naval Special Warfare Command
NV99	DEPARTMENT OF THE NAVY
NVZS	U.S. Special Operations Command (Navy)
OV99	Office of the Vice President
PO99	U.S. POSTAL SERVICE
QQ99	Office of National Drug Control Policy
ST99	DEPARTMENT OF STATE
TD02	U.S. Coast Guard
TD99	DEPARTMENT OF TRANSPORTATION
TN99	Office of the U.S. Trade Representative
TR99	DEPARTMENT OF THE TREASURY
TS99	Office of Science and Technology Policy
VA99	DEPARTMENT OF VETERAN AFFAIRS
WH01	White House Office
WH03	Office of the President
WH99	WHITE HOUSE
ZZ99	All Other Agencies

Appendix G DDDS U.S. Government Agency/Subagency Codes

Code	Description
AF01	Air Force Management Engineering Agency
AF02	Air Force Inspection and Safety Center
AF03	Air Force Operational Test and Evaluation Center
AF04	Air Force Communications Agency
AF05	Air Force Intelligence Service
AF06	Air Force Audit Agency
AF07	Air Force Office of Special Investigations
AF08	Air Force Office of Security Police
AF09	Air Force Personnel Center
AF0B	U.S. Air Force Academy
AF0D	U.S. Air Forces, Europe
AF0J	Air Training Command
AF0K	Air University
AF0M	Headquarters, Air Force Reserve
AF0N	Immediate Office, Headquarters, USAF
AF0R	Pacific Air Forces
AF0U	Electronic Security Command
AF0Y	Air Force Communications Command
AF1C	Air Combat Command
AF1G	Air Force Logistics Management Agency
AF1L	Air Mobility Command
AF1M	Air Force Materiel Command
AF1S	Space Command
AF1W	Air Force Engineering and Services Center
AF2A	Air Force Cost Center
AF2B	Air Force Doctrine Center
AF2C	Air Force Civilian Personnel Management Center
AF2D	Air Force Personnel Operations Agency
AF2E	Air Force Legal Services Center
AF2F	Air Force Medical Services Center
AF2G	Air Force Service Information and News Center
AF2H	Air Force Combat Operations Staff
AF2K	U.S. Air Force Historical Research Center
AF2L	Air Force Technical Applications Center

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
AF2M	Air Force Review Boards Office
AF2N	Air Force Center for Studies and Analyses
AF2P	Air Force Center for International Programs
AF2Q	Air Weather Service
AF2R	Air Force Program Executive Office
AF2S	HQ NORAD
AF2T	Air Force Supply Center
AF2U	Air Force Morale, Welfare and Recreation Center
AF2V	Air Force Disposal Agency
AF2W	Air Force District of Washington
AF2X	Air Force Real Estate Agency
AF2Y	Air Force Pentagon Communications Agency
AF2Z	HQ Air Force Medical Operations Agency
AF34	Air National Guard Units (Mobilization) (Title 5)
AF3C	Air Force Elements, U.S. Central Command
AF3D	Air Force Elements, U.S. Special Operations Command
AF3G	Air Force Elements, Europe
AF3I	Reservist, Centrally Managed
AF3L	Center for Air Force History
AF3M	Air Force Elements, U.S. Southern Command
AF3N	Air Force Elements, U.S. Atlantic Command
AF3O	Air Force Elements, U.S. Pacific Command
AF3Q	Air Force Elements, U.S. Strategic Command
AF3R	Air Force Elements, U.S. Readiness Command
AF3S	Headquarters, U.S. Space Command and NORAD
AF3T	Air Force Elements, U.S. Transportation Command
AF3V	Air Force Elements, Other than Europe
AF3W	Air Force Center for Environmental Excellence
AF3Y	Air Force Frequency Management Center
AF3Z	Joint Services Survival, Evasion, Resistance and Escape Agency
AFNG	Air National Guard Units (Title 32)
AFZG	U.S. Special Operations Command (ANG, Title 32)
AFZS	U.S. Special Operations Command (Air Force)
ARAE	Acquisition Executive Support Agency
ARAS	U.S. Army Intelligence and Security Command
ARAT	U.S. Army Test and Evaluation Command
ARAU	U.S. Army Audit Agency

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
ARCB	U.S. Army Criminal Investigation Command
ARCD	U.S. Army Corps of Engineers (civil program financing only)
ARCE	U.S. Army Corps of Engineers (except civil program financing)
ARCS	Immediate Office of the Chief of Staff of the Army
ARCZ	U.S. Army Information Systems Command
ARE1	Immediate Office of the Commander-in-Chief of the U.S. Army
ARE2	21st Theater Army Area Command
ARE3	U.S. Army Southern European Task Force
ARE5	U.S. Army V Corps
AREB	1st Personnel Command
ARED	U.S. Military Community Activity, Heidelberg
AREN	Seventh Army Training Command
ARFC	U.S. Army Forces Command
ARGB	Office of the Chief of the National Guard Bureau
ARHS	U.S. Army Health Services Command
ARJ1	U.S. Army Element SHAPE
ARJA	Joint Activities
ARMA	U.S. Military Academy
ARMC	U.S. Army Medical Command
ARMD	Surgeon General
ARMP	U.S. Total Army Personnel Command
ARMT	Military Traffic Management Command
ARMW	U.S. Army Military District of Washington
ARNG	Army National Guard Units (Title 32)
ARP1	U.S. Army, Pacific
ARP8	Eighth U.S. Army
ARPC	Military Entrance Processing Command
ARRC	U.S. Army Recruiting Command
arsa	Office of the Secretary of the Army
ARSB	Field Operating Offices of the Office of the Secretary of the Army
ARSC	U.S. Army Space and Strategic Defense Command
ARSE	Field Operating Agencies of the Army Staff Resourced Through OA-22
ARSJ	Joint Services and Activities Supported by the Office, Secretary of the Army
ARSP	U.S. Special Operations Command (Army)
ARSS	Staff Support Agencies of the Chief of Staff, Army v Office of the Chief of Staff of the Army
ARSU	U.S. Army Southern Command

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
ARXK	Materiel Acquisition Activities
ARXL	Materiel Acquisition Project Managers
ARXM	U.S. Army Test and Evaluation Command
ARXP	U.S. Army Security Assistance Command
ARXQ	U.S. Army Industrial Operational Command (IOC)
ARXX	Materiel Readiness Activities
DD01	Office of the Secretary of Defense
DD02	Organization of the Joint Chiefs of Staff
DD04	Defense Information Systems Agency
DD05	Defense Intelligence Agency
DD06	Defense Security Cooperation Agency
DD07	Defense Logistics Agency
DD08	U.S. Court of Appeals for the Armed Forces
DD09	American Forces Information Service
DD10	Defense Contract Audit Agency
DD11	National Imagery and Mapping Agency.
DD12	Defense Security Service
DD13	Defense Advanced Research Projects Agency
DD15	Uniformed Services University of the Health Sciences
DD16	Department of Defense Education Activity
DD17	TRICARE Support Office
DD21	Washington Headquarters Services
DD23	Office of Economics Adjustment
DD25	Defense Legal Services Agency
DD26	Office of Inspector General
DD27	Ballistic Missile Defense Organization
DD28	National Security Agency/Central Security Service
DD34	Defense Commissary Agency
DD35	Defense Finance and Accounting Service
DD36	Army/Air Force Exchange Service.
DD48	Defense Human Resources Activity
DD50	USD(A&T) Defense Support Activity
DD58	Defense Prisoner of War/Missing Personnel Office
NV08	Immediate Office of the Secretary of the Navy
NV09	Navy Staff Offices
NV10	Navy Field Offices
NV11	Immediate Office of the Chief of Naval Operations

**Defense Manpower Data Center
Common Access Card Application Programming Interface**

Code	Description
NV14	Office of Naval Research
NV18	Naval Medical Command
NV19	Naval Air Systems Command
NV22	Bureau of Naval Personnel
NV23	Naval Supply Systems Command
NV24	Naval Sea Systems Command
NV25	Naval Facilities Engineering Command
NV27	U.S. Marine Corps
NV30	Special Projects Office
NV33	Military Sealift Command
NV39	Naval Space and Warfare Systems Command
NV60	U.S. Atlantic Fleet, Commander in Chief
NV61	U.S. Naval Forces, Europe
NV62	Naval Education and Training Command
NV63	Naval Air Systems Command
NV65	Naval Oceanography Command
NV69	Naval Security Group Command
NV70	U.S. Pacific Fleet, Commander in Chief
NV72	Naval Reserve Force
NV74	Naval Special Warfare Command
NVZS	U.S. Special Operations Command (Navy)

Appendix H Error Codes

Error Code	Description
BSI_ACCESS_DENIED	Access conditions are not fulfilled.
BSI_BAD_AID	The card application of the given AID cannot be found on the card.
BSI_BAD_ALGO_ID	The algorithm ID provided to the cryptographic Provider is not supported.
BSI_BAD_AUTH	Authenticator value or type is not correct
BSI_BAD_HANDLE	Card communication handle is unknown.
BSI_BAD_PARAM	Incorrect parameter value.
BSI_BAD_TAG	Incorrect parameter value.
BSI_CARD_ABSENT	There is no card in the reader.
BSI_CARD_NOT_INIT	The smart card is not yet initialized.
BSI_CARD_PRESENT	There is a card in the reader.
BSI_CARD_REMOVED	The connected smart card has been removed.
BSI_CARD_RESET	The communication with the card was reset.
BSI_COMM_ERROR	Error during communication with the card.
BSI_CREATE_ERROR	Error creating data in Generic Container.
BSI_DATA_CORRUPTED	The provider has detected that the data read from the smart card is corrupted.
BSI_DELETE_ERROR	Error deleting data in Generic Container.
BSI_INSUFFICIENT_BUFFER	The buffer provided to retrieve data is too small.
BSI_LOAD_LIB_FAILED	Loading of card communication library failed.
BSI_NO_MORE_DATA	No space available for data creation in container.
BSI_NOT_IMPLEMENTED	The service is not implemented in the API version.
BSI_OK	Execution completed successfully.
BSI_PIN_LOCKED	The card is locked because too many wrong PINs have been entered.
BSI_READ_ERROR	Error reading data in Generic Container or getting a Certificate.
BSI_SERVICE_NOT_AVAILABLE	The card does not implement a BSI service required by the Application.
BSI_UNKNOWN_ERROR	An error occurred but the cause is unknown.
BSI_UNKNOWN_READER	Unknown reader.
BSI_UPDATE_ERROR	Error updating data in Generic Container.
BSI_ACR_NOT_AVAILABLE	The card or applet does not support the access control rule for which the application was attempting to establish a security context.