

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA1-P3 - 102

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(a)(vi)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: Voting system provider shall not have administrative account, or administrative account access.	BA1-P3-102
Cross Reference 1		Test Date
		7-25-07
Cross Reference 2		Test End Date/Time
		7-25-07
Cross Reference 3		Test Type (D/F/B)
		Functional
		Eq Type
		DRE
		Equipment Model
		AccuVote TSX
		Serial number
		0297695
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The voting system provider shall not have an administrative account, or administrative level access.

Prerequisites:

Test Procedures:

SEE TRUSTED BUILD

Variances Used During Testing:

Test Expected Outcome

The voting system provider will not have access to the system once the system has been installed and access passwords have been changed by the local election official.

Additional Observations and Findings

Observations:

Test pass due to receiving Trusted Build from
USTh and software meeting 2002 USG standards.
Additionally the devices are further secured by
the proper use of "KEY CARD TOOL" assigning unique
security for each election which the Voting System
Provider shall have no knowledge.

In addition, system access at SUPERVISOR and CENTRAL ADMIN ~~and~~ levels require smart
cards encoded with passwords defined by those controlling the election system.

Findings:

PASS

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Genevieve Mathews

Printed name

Printed name

T Bishop
Signature

7-25-07
Date

Genevieve Mathews
Signature

8-14-07
Date

Signature

Date

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Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA1-P3 - 103

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(viii)	By 3/31/08 all voting systems being submitted for certification shall have all components of voting system capable of supporting passwords of a minimum of 8 characters, which shall be capable of including numeric, alpha and special characters in upper case or lower case used in any combination.	BA1-P3 - 103
		Test Date 8/11
		Test End Date/Time
		Test Type (D-F-B) 8/11
		Functional
Cross Reference 1		Eq Type DRE
Cross Reference 2		Equipment Model AccuVote TSX
Cross Reference 3		Serial number N/A
		Manufacturer Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> This test is Not Applicable at this time - application for certification is prior to 3/31/2008. </div> <div> <u>Prerequisites:</u> N/A </div> </div> <div> <div> <u>Test Procedures:</u> This test is not applicable at this time. </div> <div> <u>Variances Used During Testing:</u> N/A </div> </div>		
Test Expected Outcome N/A until after 3/31/2008		

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

[illegible]

Attachments								
Documents (list all documents)	No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	Videos (list all videos)	No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	Photos (list all photos)	No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>

Acceptable Compensating Controls

Results Summary	Final Test Status
	N/A short

1st Review		2nd Review		Supervisor Approval	
<u>Michael L. Chandler</u> Printed name		<u>Genevieve Mathews</u> Printed name			
<u>Michael L. Chandler</u> Signature	<u>8-11-07</u> Date	<u>[Signature]</u> Signature	<u>8-14-07</u> Date	<u>[Signature]</u> Signature	<u>[Date]</u> Date

Additional Observations and Findings

Observations:

N/A Chad

Findings:

N/A Chad

1st Review

Michael L. Cummings

Printed name

Michael L. Cummings

Signature

8-11-07

Date

2nd Review

Genevieve Matthews

Printed name

Genevieve Matthews

Signature

8-14-07

Date

Supervisor Approval

Printed name

Signature

Date

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Test Number

BA1-P3 - 107

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2007-CDOS-DIE-001-0402		Test Number				
Rule or Statute 45.5.2.6.1(e)(vii)	The use of blank or empty passwords shall not be permitted at any time with the exception of a limited one-time use startup password which requires a new password to be assigned before the system can be used.	BA1-P3-107				
		Test Date 7-25-07				
		Test End Date/Time 7-25-07				
		Test Type (D,F,B) Functional				
		Eq Type DRE				
		Equipment Model AccuVote TSX				
		Serial number [blank]				
		Manufacturer Diebold				
Test Procedure Specification						
<table border="1"> <tr> <td> Purpose: The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time. </td> <td> Prerequisites: [blank] </td> </tr> <tr> <td> Test Procedures: SEE BA1-P3-111 </td> <td> Variances Used During Testing: [blank] </td> </tr> </table>			Purpose: The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time.	Prerequisites: [blank]	Test Procedures: SEE BA1-P3-111	Variances Used During Testing: [blank]
Purpose: The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time.	Prerequisites: [blank]					
Test Procedures: SEE BA1-P3-111	Variances Used During Testing: [blank]					
Test Expected Outcome The voting system and operating system shall be configured to prevent the use of null passwords.						

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations: *SEE BA1-P3-111*

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Genevieve Mathews

Printed name

Printed name

T Bishop

Signature

7-25-07

Date

Genevieve Mathews

Signature

8-14-07

Date

Signature

Date

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Application Date: *04/02/2007*

Test Number

BA1-P3 - 111

{This page intentionally left blank}

Rule or Statute 45.5.2.6.1(e)(I)	2007-CDOS-DIE-001-0402	Test Number BA1-P3-111
	The voting system shall meet the following requirements for password security: All passwords shall be stored and used in a non-reversible format;	Test Date 7-25-07
		Test End Date/Time 7-25-07
Cross Reference 1		Test Type (D/F/B) Functional
		Eq Type DRE
Cross Reference 2		Equipment Model AccuVote TSX
		Serial Number 0297695
Cross Reference 3		Manufacturer Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format.

Prerequisites:

Test Procedures:

See trusted Build of DRE and KeyCARD Tool.

Variances Used During Testing:

Test Expected Outcome

The voting system shall produce evidence that passwords are encrypted (non-reversible).

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations:

Verified during Trusted Build and USB review
of the software used to set encryption of the
DRE's (KeyCard Pool)

Keycard Pool terminates if an attempt is made
to update access cards (Admin, Supervisor or Security
cards) with a blank password.

Findings:

Password for DRE access may not be blank due to
encryption software termination.

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Genevieve Matthews
Printed name

Printed name

Tim Bishop
Signature

7-25-07
Date

Gene Matthews
Signature

8-14-07
Date

Signature

Date

1841-123-111 7-25-07 .004

Key Card Tool

Central Admin Card Updated.
Please remove the access card.

Target Version: Ballot Station 4.6

Action: Update Central Administrator Card

Reader Setup

Port: COM1 [SecureTech ST-100]

Use Default

Smart Card Key: DD0AEFDD0AEFDD0A D97C8553

New Security Keys

Use Default Generate

Smart Card Key: ED0AEFDD0AEFDD0A D97C8553

Data Key: 4632363534684434 A2411F11

4632363534684434

Authorization PIN: 111111

SecureTech ST-100

Version 4.6.3

BA1-13-111 7-25-07 . 003

BA1-P3-111 7-25-2007 .002

Key Card Tool

Supervisor Card Updated

Please remove the access card.

Target Version:

Ballot Station 4.6

Action:

Update Supervisor Card

Reader Setup

Port:

COM1

SecureTech ST-1001

Use Default

New Security Keys

Smart Card Key:

ED0AED0AED0AED0A

D97C8553

Data Key:

4632363534684434

A241BFR1

4632363534684434

Authorization PIN:

1111

Generate

Use Default

Supervisor Card Updated

Version 4.6.1

BAI-135-111 7-25-07, 001

Security Key Card

SI-100

Supervisor Card

Calculator keypad with numbers 1-9, 0, *, /, and function keys.

Small card or label with some text.

Computer keyboard keys: Shift, Ctrl, Delete, End, Page Down, Home, Backspace, F11, F12.

6-in-1 PC Card

Small label or tag with text.

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Application Date: *04/02/2007*

Test Number

BA1-P3 - 112

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(iv)	The voting system shall meet the following requirements for password security: The application's database management system shall require separate passwords for the administrative and each user/operator accounts with access to the application.	BA1-P3-112
Cross Reference 1		Test Date
		7-25-07
Cross Reference 2		Test End Date/Time
		7-25-07
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		DRE
		Equipment Model
		AccuVote TSX
		Serial Number
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the application's database management system shall require separate passwords for each user/operator account including the administrator account.

Prerequisites:

Test Procedures:

See BA1-P3-111

Variances Used During Testing:

Test Expected Outcome

Voting system allows for different accounts each with unique and independent passwords according to class/subclass architecture.

Additional Observations and Findings

Observations:

Although not required by the encryption software (Keycard Pool) the vendor does recommend the passwords be set differently per each level of access - Admin, Supervisor, & Security. See BA1-P3-111

Findings:

It is possible to have different passwords for the various levels of access cards.

1st Review

2nd Review

Supervisor Approval

T. Bishop
Printed name

Geneie Mathews
Printed name

John Green
Printed name

T. Bishop
Signature

7-25-07
Date

Geneie Mathews
Signature

8-14-07
Date

John Green
Signature

8/15/07
Date

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Test Number

BA1-P3 - 113

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2007-CDOS-DIE-001-0402		Test Number				
Rule or Statute 45.5.2.6.1(e)(v)	The voting system shall meet the following requirements for password security: The system shall be designed in such a way that the use of any administrative account password shall not be required for normal operating functions at any remote location.	BA1-P3-113				
		Test Date 7-25-07				
		Test End Date/Time 7-25-07				
Cross Reference 1		Test Type (D/F/B) Functional				
		Eq Type DRE				
Cross Reference 2		Equipment Model AccuVote TSX				
		Serial number				
Cross Reference 3		Manufacturer Diebold				
Test Procedure Specification						
<table border="1"> <tr> <td> Purpose: The purpose of this test is to verify that the use of any administrative account password shall not be used for any normal operating functions at any remote location. </td> <td> Prerequisites: </td> </tr> <tr> <td> Test Procedures: SEE BA1-P3-111 </td> <td> Variances Used During Testing: </td> </tr> </table>			Purpose: The purpose of this test is to verify that the use of any administrative account password shall not be used for any normal operating functions at any remote location.	Prerequisites:	Test Procedures: SEE BA1-P3-111	Variances Used During Testing:
Purpose: The purpose of this test is to verify that the use of any administrative account password shall not be used for any normal operating functions at any remote location.	Prerequisites:					
Test Procedures: SEE BA1-P3-111	Variances Used During Testing:					
Test Expected Outcome The voting system security architecture allows for class/subclass accounts accounts based on least privilege and role based access. The system administrative password is not needed for any function during normal operations.						

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Test Log

[illegible]

Attachments

No ☐ *Yes* ☐

Acceptable Compensating Controls

Results Summary

Test Meets Expected Outcome

Final Test Status

1

1st Review

✓ Bishop

Printed name _____

2nd Review

Genevieve Mathews

Printed name

Supervisor Approval

Jim Bishop
Signature

Signature

7-25-07
Date

Date _____

Gen. Matt
Signature

Signature

814-07
Date

Date _____

Printed name _____

Signature

Date _____

Additional Observations and Findings

Observations:

SEE BA1-P3-111

Findings:

Administrator and Supervisor cards may have different passwords

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Genieve Mathews
Printed name

Printed name

T Bishop 7-25-07
Signature Date

Genieve Mathews 8-14-07
Signature Date

Signature

Date

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Secretary of State

Holly Lowder
Director of Elections

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Application Date: *04/02/2007*

Test Number

BA1-P3 - 114

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(vi)	The voting system shall meet the following requirements for password security: The system shall be designed in such a way to facilitate the changing of passwords for each election cycle.	BA1-P3-114
Cross Reference 1		Test Date
		7-25-07
Cross Reference 2		Test End Date/Time
		7-25-07
Cross Reference 3		Test Type (D, I, B)
		Functional
		Eq Type
		DRE
		Equipment Model
		AccuVote TSX
		Serial Number
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system is designed in such a way to facilitate the changing of passwords for each election cycle or as needed.

Prerequisites:

Test Procedures:

SEE BA1-P3-111

Variances Used During Testing:

Test Expected Outcome

The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. Password shall be able to be changed as often as needed without voting system provider assistance.

Additional Observations and Findings

Observations: *SEE BA1-P3-111*

Findings: *Password is easily changed per each election cycle using Keycard Tool.*

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Genevieve Mathews
Printed name

Th. GORDON
Printed name

T Bishop *7-25-07*
Signature Date

Gm Mathews *8-14-07*
Signature Date

[Signature] *8/15/07*
Signature Date

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Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA2-P3 - 201

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(a)(vi)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: Voting system provider shall not have administrative account, or administrative account access.	BA2-P3-201
		Test Date 7-25-07
		Test End Date/Time 7-25-07
		Test Type (D/F/B) Functional
		Eq Type PCOS
Cross Reference 1		Equipment Model OS 1.96.6
		Serial Number 39015
Cross Reference 2		Manufacturer Diebold
Cross Reference 3		
Test Procedure Specification		
<div> <div> Purpose: <p>The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The voting system provider shall not have an administrative account, or administrative level access.</p> </div> <div> Prerequisites: </div> </div>		
<div> <div> Test Procedures: <p>See log</p> </div> <div> Variances Used During Testing: </div> </div>		
Test Expected Outcome		
The voting system provider will not have access to the system once the system has been installed and access passwords have been changed by the local election official.		

[illegible]

Additional Observations and Findings

Observations:

Password for OS access is set during election
definition creation in GEMS 1-18-24

Setup > AccuVote-OS ~~SETTINGS~~ Options
AccuVote-OS SETTINGS

PASSWORD

— BA2-P3-201 07-25-07.001

Password is limited to [REDACTED] characters
Password is for Administrative actions only. It is not
settable for user level.
Blank password is not allowed

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

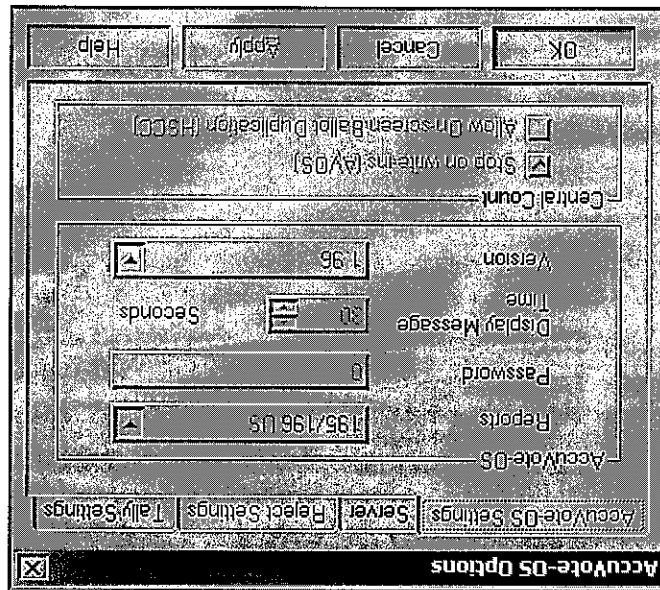
Genice Mathews
Printed name

Printed name

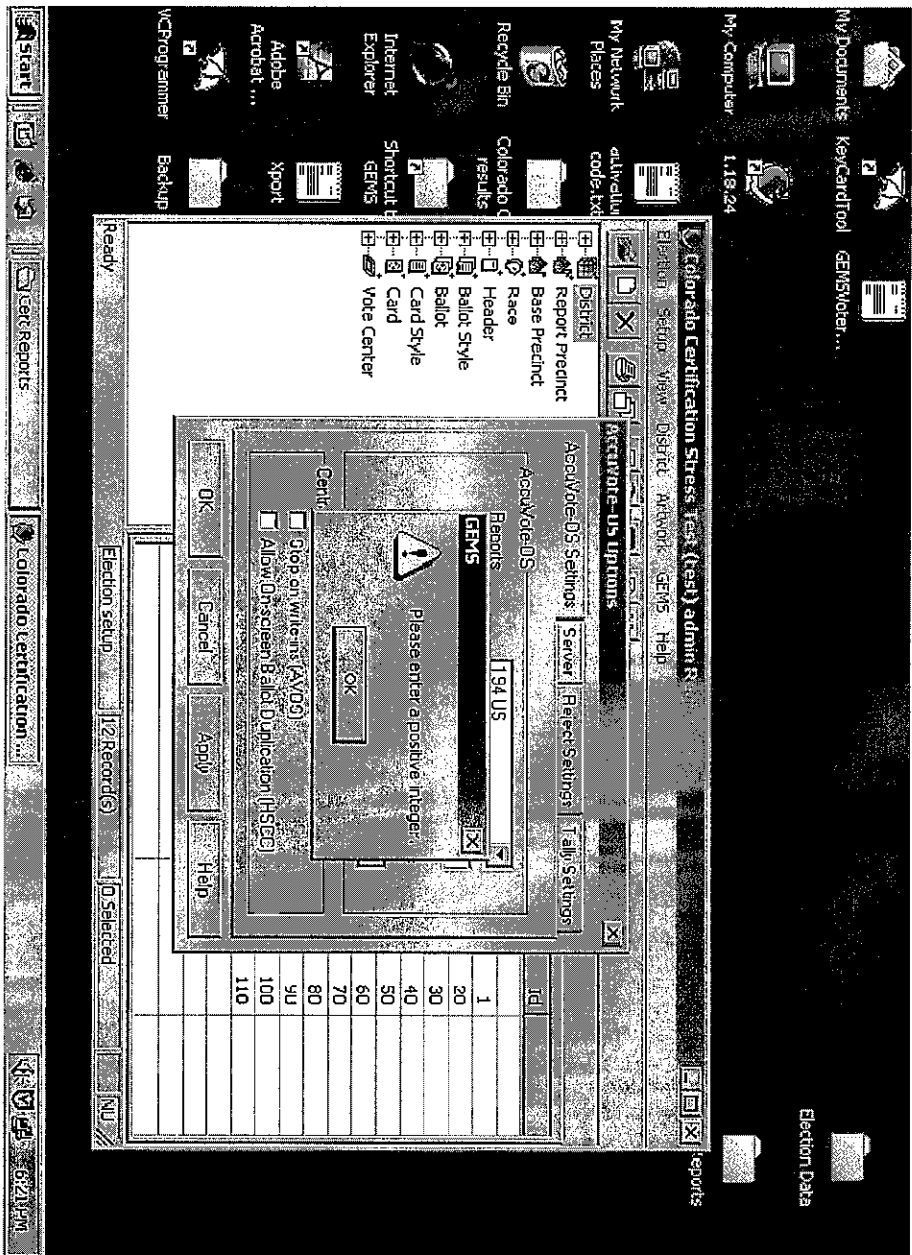
T Bishop 7-25-07
Signature Date

Gen Math 8-14-07
Signature Date

Signature Date



BA2-03-201 07-25-07 .001



USA2-NS-201 07-25-01 .002

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Test Number

BA2-P3 - 202

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2007-CDOS-DIE-001-0402		Test Number				
Rule or Statute 45.5.2.6.1(e)(iv)	The voting system shall meet the following requirements for password security: The application's database management system shall require separate passwords for the administrative and each user/operator accounts with access to the application.	BA2-P3-202				
		Test Date 7-25-07				
		Test End Date/Time 7-25-07				
Cross Reference 1		Test Type (D, F, B) Functional				
		Eq type PCOS				
Cross Reference 2		Equipment/Model OS 1.96.6				
		Serial number 39015				
Cross Reference 3		Manufacturer Diebold				
Test Procedure Specification						
<table border="0"> <tr> <td style="vertical-align: top;"> <u>Purpose:</u> The purpose of this test is to verify that the application's database management system shall require separate passwords for each user/operator account including the administrator account. </td> <td style="vertical-align: top;"> <u>Prerequisites:</u> </td> </tr> <tr> <td style="vertical-align: top;"> <u>Test Procedures:</u> SEE BA2-P3-201 </td> <td style="vertical-align: top;"> <u>Variances Used During Testing:</u> </td> </tr> </table>			<u>Purpose:</u> The purpose of this test is to verify that the application's database management system shall require separate passwords for each user/operator account including the administrator account.	<u>Prerequisites:</u> 	<u>Test Procedures:</u> SEE BA2-P3-201	<u>Variances Used During Testing:</u>
<u>Purpose:</u> The purpose of this test is to verify that the application's database management system shall require separate passwords for each user/operator account including the administrator account.	<u>Prerequisites:</u> 					
<u>Test Procedures:</u> SEE BA2-P3-201	<u>Variances Used During Testing:</u> 					
Test Expected Outcome Voting system allows for different accounts each with unique and independent passwords according to class/subclass architecture.						

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

This system does not set user level access on the optical scan devices, supervisor only

Findings:

FAIL

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Genevieve Mathews

Printed name

Printed name

T Bishop

Signature

7-25-07

Date

Gene Mathews

Signature

8-14-07

Date

Signature

Date

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Test Number

BA2-P3 - 203

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(v)	The voting system shall meet the following requirements for password security: The system shall be designed in such a way that the use of any administrative account password shall not be required for normal operating functions at any remote location.	BA2-P3-203
		Test Date 7-25-07
		Test End Date/Time 7-25-07
Cross Reference 1		Test Type (D.F.B) Functional
		Eq. type PCOS
Cross Reference 2		Equipment Model OS 1.96.6
		Serial number 39015
Cross Reference 3		Manufacturer Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> The purpose of this test is to verify that the use of any administrative account password shall not be used for any normal operating functions at any remote location. </div> <div> <u>Prerequisites:</u> </div> </div>		
<div> <div> <u>Test Procedures:</u> SEE BA2-P3-201 </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
<u>Test Expected Outcome</u> The voting system security architecture allows for class/subclass accounts accounts based on least privilege and role based access. The system administrative password is not needed for any function during normal operations.		

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations: Password required at remote locations is different than the administrative account password.

Findings:

1st Review

2nd Review

Supervisor Approval

T. Bishop

Printed name

Geneice Mathews

Printed name

Printed name

T. Bishop

Signature

7-25-07

Date

Gene Mathews

Signature

8-14-07

Date

Signature

Date

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Mike Coffman
Secretary of State

Holly Lowder
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CDOS Certification Number: **2007-CDOS-DIE-001-0402**

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Test Number

BA2-P3 - 208

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(vii)	The use of blank or empty passwords shall not be permitted at any time with the exception of a limited one-time use startup password which requires a new password to be assigned before the system can be used.	BA2-P3-208
Cross Reference 1		Test Date
		7-25-07
Cross Reference 2		Test End Date/Time
		7-25-07
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		PCOS
		Equipment Model
		OS 1.96.6
		Serial Number
		39015
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time.

Prerequisites:

Test Procedures:

See BA2-P3-201

Variances Used During Testing:

Test Expected Outcome

The voting system and operating system shall be configured to prevent the use of null passwords.

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

Blank password is not allowed in OS configuration
setup during Election definition process in GEMS 1-18-14.

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Genieve Mathews
Printed name

Printed name

T Bishop 7-25-07
Signature Date

Genieve Mathews 8-14-07
Signature Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA2-P3 - 209

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(viii)	By 3/31/08 all voting systems being submitted for certification shall have all components of voting system capable of supporting passwords of a minimum of 8 characters, which shall be capable of including numeric, alpha and special characters in upper case or lower case used in any combination.	BA2-P3-209
		Test Date
		8/11
		Test End Date/Time
		8/11
		Test Type (D-F-B)
		Functional
		Eq. Type
		PCOS
		Equipment Model
	OS 1.96.6	
	Serial number	
	N/A	
	Manufacturer	
	Diebold	

Test Procedure Specification

Purpose:

This test is Not Applicable at this time - application for certification is prior to 3/31/2008.

Prerequisites:

~~NA~~ N/A

Test Procedures:

This test is not applicable at this time.

Variances Used During Testing:

N/A

Test Expected Outcome

N/A until after 3/31/2008

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Test Mode

[illegible]

Attachments

Documents
(list all documents)

No

☒ ☐

Yes ☐

Videos
(list all videos)

No

~~No ☐~~

Yes ☐

Photos
(list all photos)

No

No

Yes ☐

Acceptable Compensating Controls

Results Summary

Final Test Status

N/A

1st Review

Michael L. Chowell
Printed name

2nd Review

Geneice Mathews
Printed name

Supervisor Approval

Ida Gardner
Printed name

Michael G. Chadwell 8.11.07
Signature Date


Signature

8.14.07
Date

Signature Date

Additional Observations and Findings

Observations:

N/A
closed

Findings:

N/A
closed

1st Review

Michael L. Crowell
Printed name

Michael L. Crowell
Signature
8-11-07
Date

2nd Review

Genevieve Mathews
Printed name

Genevieve Mathews
Signature
8-14-07
Date

Supervisor Approval

John Gardner
Printed name

John Gardner
Signature
8-15-07
Date

State of Colorado
Department of State
1700 Broadway
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Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA2-P3 - 211

{This page intentionally left blank}

2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(vi)	The voting system shall meet the following requirements for password security: The system shall be designed in such a way to facilitate the changing of passwords for each election cycle.	BA2-P3-211
		Test Date 7-25-07
		Test End Date/Time 7-25-07
		Test Type (D, F, B) Functional
		Eq Type PCOS
Cross Reference 1		Equipment Model OS 1.96.6
		Serial Number 89015
Cross Reference 2		Manufacturer Diebold
Cross Reference 3		
Test Procedure Specification		
<div> <div> <u>Purpose:</u> <p>The purpose of this test is to verify that the voting system is designed in such a way to facilitate the changing of passwords for each election cycle or as needed.</p> </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <p>See BA2-P3-201</p> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
<u>Test Expected Outcome</u> <p>The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. Password shall be able to be changed as often as needed without voting system provider assistance.</p>		

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Continue to next page...

Additional Observations and Findings**Observations:**

Password for supervisor function only, set during Election Definition.

The program that actually is used to set/change passwords for all access cards (SUPER, ADMIN, SECURITY) ~~is~~ is .KorCardTool and is accessed at any time by the authorized election administrator having access to the election definition level of the system. Chad

Findings:

By way of KorCardTool, passwords may be changed at any time. See attachment BA2-P3-211-1 Chad

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Gereise Mathews

Printed name

Printed name

T Bishop

Signature

7-26-07

Date

Gereise Mathews

Signature

8-14-07

Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA2-P3 - 213

{This page intentionally left blank}

2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(i)	The voting system shall meet the following requirements for password security: All passwords shall be stored and used in a non-reversible format;	BA2-P3-213
		Test Date 7-26-07
		Test End Date/Time 7-26-07
		Test Type (ID, I, B) Functional
		Eq Type PCOS
		Equipment Model OS 1.96.6
		Serial number 39015
		Manufacturer Diebold
Test Procedure Specification		
<div> <div> Purpose: The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format. </div> <div> Prerequisites: </div> </div>		
<div> <div> Test Procedures: See test log. </div> <div> Variances Used During Testing: </div> </div>		
Test Expected Outcome The voting system shall produce evidence that passwords are encrypted (non-reversible).		

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

Password is stored in the local database in
clear text. See Attached Screenshots of GEMS
Password changing & storing.

Findings:

Fail

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Geneice Mathews
Printed name

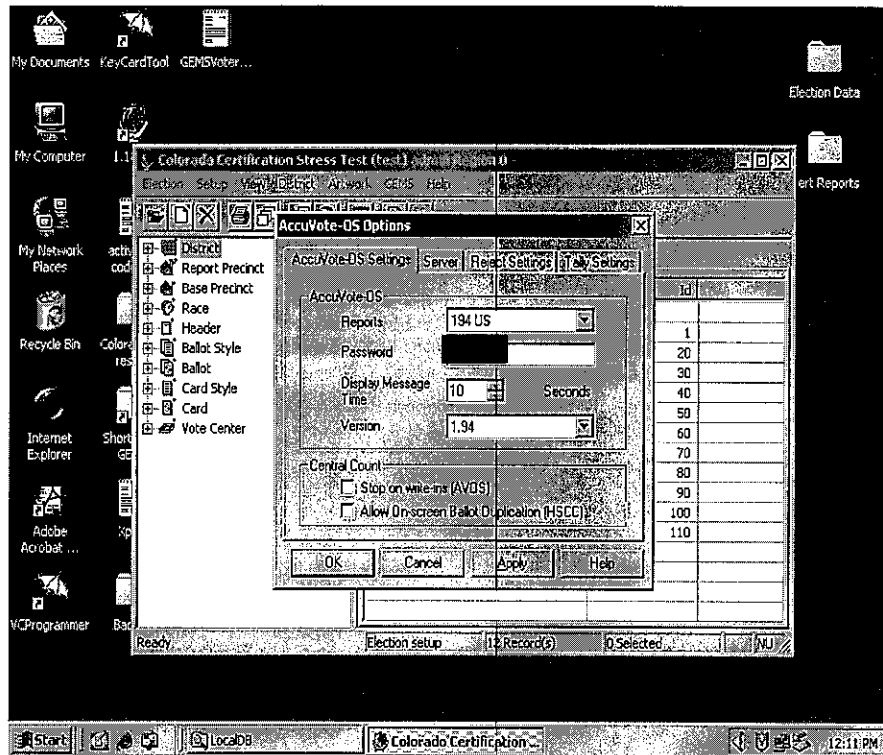
blh Gardner
Printed name

T Bishop 7-26-07
Signature Date

Gene Mathews 8-14-07
Signature Date

[Signature] 8/14/07
Signature Date

BA2-P3-213 07-26-07.001



BA2-P3-213 07-26-07.00X

Microsoft Access

File Edit View Insert Format Records Tools Window Help

test : Database (Access 2000 file format)

Preference : Table

Keyld	Data
5	65554
10	Colorado Certification Stress Test
15	63190416
20	1 0 53 3 0 11 11 11 22 10 3 0 11 11 11 22 10
21	1
25	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 144 0 0 0 0 0 0 0 16777215 16777215 16777
40	1137088800
50	0 0 0 7 10 1 19401 "" 0 "" "" 0
55	1 15 15 3 60 2 0 65536 40 0 0 1024
60	194 US
70	N
90	0
100	1 0 1 0 0 1 1 1 0 1 1 1 1 0 0 0
110	-16777216 0 60 255 0 200 0 0 32 "Arial" 156 63 0 0 0 0 1 32 1920 1 1 32 0
120	-16777216 0 60 255 0 200 0 0 32 "Arial Narrow" 156 63 0 0 0 0 1 32
130	0
140	1 0 1
150	-16777216 0 60 255 0 200 0 0 32 "Arial Narrow" 156 63 0 0 0 0 2 32
160	-16777216 0 60 255 0 200 0 0 32 "Arial" 156 63 0 0 0 0 1 32 1920 -1677721
170	0
180	Colorado Certification Stress Test

Record: 8 of 21

Datasheet View

Microsoft Access

File Edit View Insert Format Records Tools Window Help

test : Database (Access 2000 file format)

Preference : Table

Keyld	Data
5	65554
10	Colorado Certification Stress Test
15	63190416
20	1 0 53 3 0 11 11 11 22 10 3 0 11 11 11 22 10
21	1
25	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 144 0 0 0 0 0 0
40	1137088800
50	0 0 0 7 10 1 19401 "" 0 "" "" 0
55	1 15 15 3 60 2 0 65536 40 0 0 1024
60	194 US
70	N
90	0
100	1 0 1 0 0 1 1 1 0 1 1 1 1 0 0 0
110	-16777216 0 60 255 0 200 0 0 32 "Arial" 156 B
120	-16777216 0 60 255 0 200 0 0 32 "Arial Narro
130	0
140	1 0 1
150	-16777216 0 60 255 0 200 0 0 32 "Arial Narro
160	-16777216 0 60 255 0 200 0 0 32 "Arial" 156 B
170	0
180	Colorado Certification Stress Test

Record: 8 of 21

Datasheet View

15A2-15-215 01-26-07.0054

AccuVote-OS Options

AccuVote-OS Settings | **Server** | Reject Settings | Tally Settings

AccuVote-OS

Reports: 194 US

Password: [REDACTED]

Display Message Time: 10 Seconds

Version: 1.94

Central Count

☐ Stop on write-ins (AVDS)

☐ Allow On-screen Ballot Duplication (HSCC)

OK Cancel Apply Help

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 306

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(a)(vi)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: Voting system provider shall not have administrative account, or administrative account access.	BA3-P3-306
		Test Date
		7-28-07
		Test End Date/Time
		7-26-07
Cross Reference 1		Test Type (D-F-B)
		Functional
		Eq Type
		CCOS
Cross Reference 2		Equipment Model
		OS 2.0.12
		Serial number
		35049
Cross Reference 3		Manufacturer
		Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> <p>The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The voting system provider shall not have an administrative account, or administrative level access.</p> </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <p>SEE BA2-P3-201</p> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
Test Expected Outcome		
The voting system provider will not have access to the system once the system has been installed and access passwords have been changed by the local election official.		

Additional Observations and Findings

Observations: See test BA2-P3-201

Configuration of Central Count OS machines is the same. ~~the~~

In order for the device to be deployed in its intended role of Current Count, operational communication by way of GOM3 software interface and security is required. That entry point security is controlled by the election system administrator who defines the scope of all user/administrative accounts. Refer to the BA4-P3-400 series for proposed definitions of security features related to this requirement and refer to BA4-P3-410 specifically. *Chad*

Findings:

Device meets requirement within scope of intended use model. *Chad*

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Genevieve Matthews
Printed name

Printed name

T Bishop 7-26-07
Signature Date

Genevieve Matthews 8-14-07
Signature Date

Signature Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 308

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Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Activities and Entries

Incident Reports

[illegible]

No

☒

Yes

7

No

☒

Yes

7

No

☒ ☐

Ye

7

Acceptable Compensating Controls

Final Test Status

N/A check

Supervisor Approval

Printed name

Printed name

Printed name _____

Signature

11.07
Date

Signature

3-14
Date

Signature

Date: _____

Additional Observations and Findings

Observations:

N/A Chad

Findings:

N/A Chad

1st Review

Michael L. Cundwell
Printed name

Michael L. Cundwell
Signature

8.11.07
Date

2nd Review

Genie Mathews
Printed name

Genie Mathews
Signature

8-14-07
Date

Supervisor Approval

John Gordon
Printed name

John Gordon
Signature

8/14/07
Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 311

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(i)	The voting system shall meet the following requirements for password security: All passwords shall be stored and used in a non-reversible format;	BA3-P3-311
Cross Reference 1		Test Date
		07-26-07
Cross Reference 2		Test End Date/Time
		07-26-07
Cross Reference 3		Test Type (D/F/B)
		Functional
		Eq Type
		CCOS
		Equipment Model
		OS 2.0.12
		Serial number
		35049
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format.

Prerequisites:

Test Procedures:

SEE BA2-P3-~~20~~213

Variances Used During Testing:

Test Expected Outcome

The voting system shall produce evidence that passwords are encrypted (non-reversible).

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

See BA2-P3-213

Findings:

FAIL

IS THIS N/A - WHAT
PROBLEMS ARE BEING
USED FOR CC MACHINES?

1st Review

2nd Review

T Bishop

Printed name

Gerice Mathews

Printed name

T Bishop

Signature

7-26-07

Date

Gerice Mathews

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 312

{This page intentionally left blank}

Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(iv)	The voting system shall meet the following requirements for password security: The application's database management system shall require separate passwords for the administrative and each user/operator accounts with access to the application.	BA3-P3-312
Cross Reference 1		Test Date
		7-26-07
Cross Reference 2		Test End Date/Time
		7-26-07
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		CCOS
		Equipment Model
		OS 2.0.12
		Serial number
		35049
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the application's database management system shall require separate passwords for each user/operator account including the administrator account.

Prerequisites:

Test Procedures:

See BA2-P3-202

Variances Used During Testing:

Test Expected Outcome

Voting system allows for different accounts each with unique and independent passwords according to class/subclass architecture.

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations: *See BA2-P3-207*

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Gencie Mathews
Printed name

Printed name

T Bishop
Signature

7-26-07
Date

Gencie Mathews
Signature

8-14-07
Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 313

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(vii)	The use of blank or empty passwords shall not be permitted at any time with the exception of a limited one-time use startup password which requires a new password to be assigned before the system can be used.	BA3-P3-313
Cross Reference 1		Test Date
		7-26-07
Cross Reference 2		Test End Date/Time
		7-26-07
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		CCOS
		Equipment Model
		OS 2.0.12
		Serial number
		35049
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time.

Prerequisites:

Test Procedures:

See BA2-P2-208

Variances Used During Testing:

Test Expected Outcome

The voting system and operating system shall be configured to prevent the use of null passwords.

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations: *See BA2-P3-208*

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Genevieve Mathews

Printed name

Printed name

T Bishop

Signature

7-26-07

Date

Genevieve Mathews

Signature

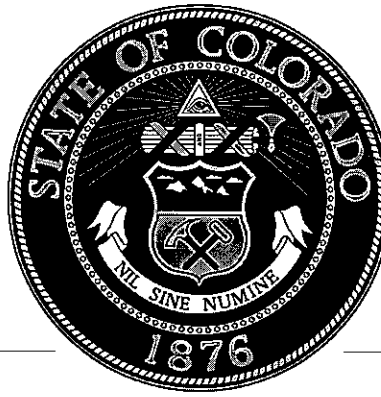
8-14-07

Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA3-P3 - 314

{This page intentionally left blank}

2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(vi)	The voting system shall meet the following requirements for password security: The system shall be designed in such a way to facilitate the changing of passwords for each election cycle.	BA3-P3-314
		Test Date 7-26-07
		Test End Date/Time 7-26-07
Cross Reference 1		Test Type (D,F,B) Functional
		Eq Type CCOS
Cross Reference 2		Equipment Model OS 2.0.12
		Serial number 35045
Cross Reference 3		Manufacturer Diebold
Test Procedure Specification		
Purpose: The purpose of this test is to verify that the voting system is designed in such a way to facilitate the changing of passwords for each election cycle or as needed.		Prerequisites:
Test Procedures: See BA2-P3-211		Variances Used During Testing:
Test Expected Outcome The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. Password shall be able to be changed as often as needed without voting system provider assistance.		

Additional Observations and Findings

Observations:

See BA2-P3-211 + BA2-P3-201

The ~~Current Count~~ machine serves as a ballot scan input device ~~to~~ directly to the GEMS election management software component of the system. As such the device can not be accessed without going through the password security interface of the main application. Refer to BA4-P3-402 for the specifics related to this aspect of the application that controls this device. *lmd*

Findings:

As a component of a larger system the device meets the requirement as a subset of BA4-P3-402. *lmd*

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Genevieve Mathews

Printed name

Printed name

T Bishop

Signature

7-26-07

Date

Genevieve Mathews

Signature

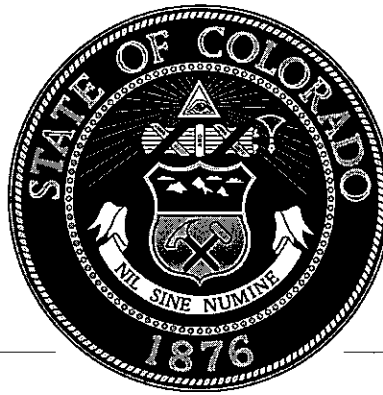
8-14-07

Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 401

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(a)(iii)(d)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique System User/operator account shall be created for operating system use that is restricted from the following aspects of the operating system: No access to modify other user/operator accounts on the system.	BA4-P3-401
		Test Date
		Test End Date/Time
Cross Reference 1		Test Type (D,F,B)
		Functional
		Eq Type
		Software
Cross Reference 2		Equipment Model
		GEMS 1-18-24
		Serial number
Cross Reference 3		Manufacturer
		Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> <p>The purpose of this test is to verify that the voting system shall contain a unique system user account with permissions described herein.</p> </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <p>See Trusted Build</p> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
Test Expected Outcome		
The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. User/Operator accounts have no access to modify other accounts.		

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations: *Verified during trusted build this is a standard
Windows Server 2000 procedure*

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael L. Chadwell
Printed name

Printed name

T Bishop
Signature

7-23-07
Date

Michael L. Chadwell
Signature

8.14.07
Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 402

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Additional Observations and Findings

Observations:

See BA1-P3-114 re: Keycard tool not passworded for devices
 BA4-P3-402 07-26-07-001 shows user login
 to access the GEMS software
 BA4-P3-402 07-26-07-002 shows where password
 may be change for the user.

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
 Printed name

Michael L. Anderson
 Printed name

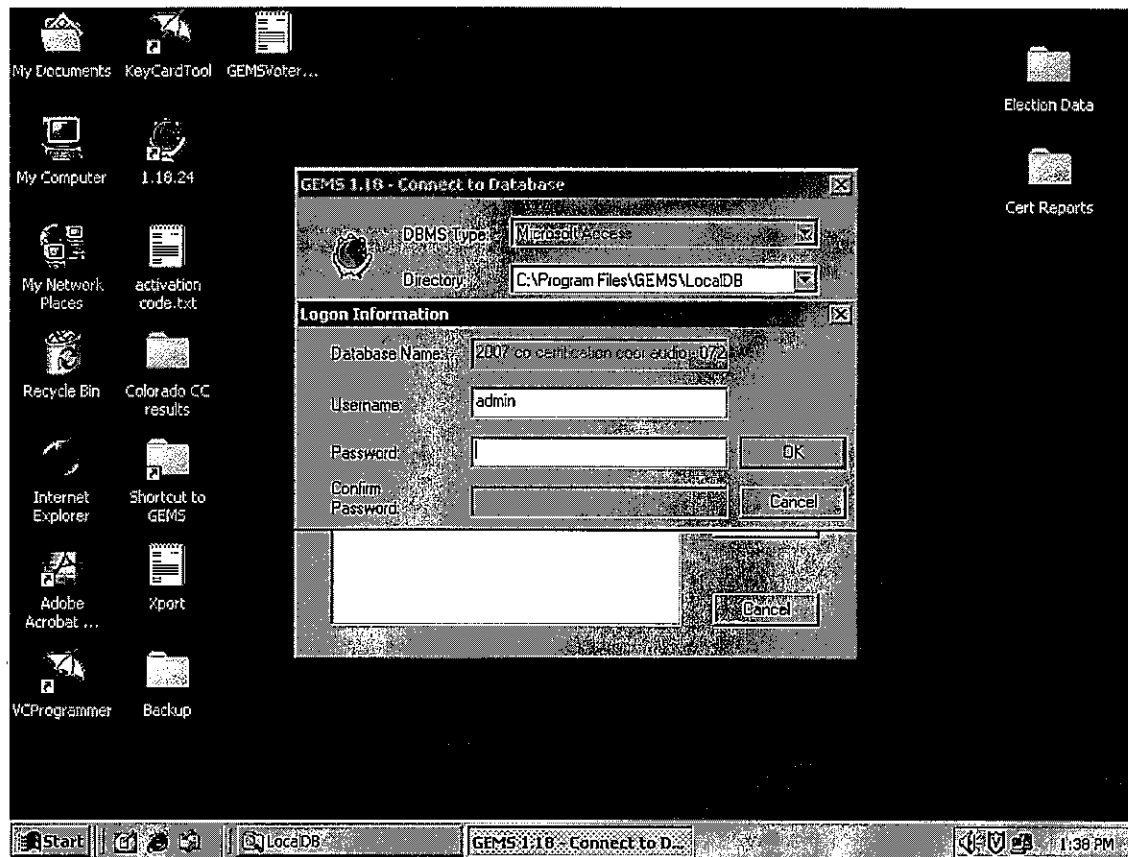
John Green
 Printed name

T Bishop 7-23-07
 Signature Date

Michael Anderson 8-15-07
 Signature Date

[Signature] 8/15/07
 Signature Date

BA4-P3-402 02-26-01



BA4-P3-402 07-26-07-002

My Computer JResultClient
My Documents activation.rtf
My Network Places
Recycle Bin
Internet Explorer
Nero StartSmart
Adobe Acrobat...
Sound Forge Audio Stu...
WinZip

Colorado Certification Coordinated Election November 2007 to certify for audio (c1-p3-119) admin.rtf
Election Setup View Network GEMS Help
District
Report Precinct
Base Precinct
Race
Header
Ballot Style
Ballot
Card Style
Card
Vote Center

Users
Users
Use
adm
tim

Colorado Certification Coordinated Election November 2007 to certify for audio (c1-p3-119) admin.rtf
Election Setup View Network GEMS Help
District
Label
ID

Users
Edit User
Username: admin
Full Name: admin
New Password: *****
Confirm Password: *****
Region: Host
OK Cancel Apply

NUM
DisSelected
10 Record(s)
Cards Printed
Document - WordPad
Colorado certification...
My Computer
Ready

6:57 PM

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 403

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Rule or Statute 45.5.2.6.1(a)(iv)	2007-CDOS-DIE-001-0402	Test Number BA4-P3-403
	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique application administrative account shall be created which has full access and rights to the application and database;	Test Date
		Test End Date/Time
Cross Reference 1		Test Type (D/F/B) Functional
		Eq Type Software
Cross Reference 2		Equipment Model GEMS 1-18-24
		Serial Number
Cross Reference 3		Manufacturer Diebold

Test Procedure Specification

<p><u>Purpose:</u></p> <p>The purpose of this test is to verify that the voting system shall contain a unique application administrative account with permissions described herein.</p>	<p><u>Prerequisites:</u></p>
<p><u>Test Procedures:</u></p> <p>See trusted build - GEMS Setup</p>	<p><u>Variances Used During Testing:</u></p>

<p align="center"><u>Test Expected Outcome</u></p> <p>The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. User/Operator accounts have no access to modify or create other accounts.</p>

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations:

Verified during Remote Build & GEMS setup

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael H. Chodwell
Printed name

John GARDNER
Printed name

T Bishop 7-23-07
Signature Date

Michael H. Chodwell 8-14-07
Signature Date

John Gardner 8/17/07
Signature Date

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Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 404

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(viii)	By 3/31/08 all voting systems being submitted for certification shall have all components of voting system capable of supporting passwords of a minimum of 8 characters, which shall be capable of including numeric, alpha and special characters in upper case or lower case used in any combination.	BA4-P3-404
Cross Reference 1		Test Date
		8/1
Cross Reference 2		Test End Date/Time
		8/1
Cross Reference 3		Test Type (D/F/B)
		Functional
		Eq Type
		Software
		Equipment/Model
		GEMS 1-18-24
		Serial number
		N/A
		Manufacturer
		Diebold

Test Procedure Specification

<p><u>Purpose:</u></p> <p>This test is Not Applicable at this time - application for certification is prior to 3/31/2008.</p>	<p><u>Prerequisites:</u></p> <p>This test is not applicable at this time.</p>
<p><u>Test Procedures:</u></p> <p>N/A</p>	<p><u>Variances Used During Testing:</u></p> <p>N/A</p>

Test Expected Outcome
N/A until after 3/31/2008

Additional Observations and Findings

Observations:

N/A
Chad

Findings:

N/A
Chad

1st Review

2nd Review

Supervisor Approval

Maureen L. Cunniff

Printed name

Printed name

Printed name

Michael S. Chadwell

Signature

8.11.07

Date

Signature

Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 405

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2007-CDOS-DIE-001-0402		Test Number						
Rule or Statute 45.5.2.6.1(e)(i)	The voting system shall meet the following requirements for password security: All passwords shall be stored and used in a non-reversible format;	BA4-P3-405						
		Test Date 07-26-07						
		Test End Date/Time 07-26-07						
Cross Reference 1		Test Type (D.F.B) Functional						
		Eq Type Software						
Cross Reference 2		Equipment Model GEMS 1-18-24						
		Serial number						
Cross Reference 3		Manufacturer Diebold						
Test Procedure Specification								
<table border="1"> <tr> <td> Purpose: The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format. </td> <td> Prerequisites: </td> </tr> <tr> <td> Test Procedures: Search for password storage </td> <td> Variances Used During Testing: </td> </tr> <tr> <td colspan="2"> Test Expected Outcome The voting system shall produce evidence that passwords are encrypted (non-reversible). </td> </tr> </table>			Purpose: The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format.	Prerequisites:	Test Procedures: Search for password storage	Variances Used During Testing:	Test Expected Outcome The voting system shall produce evidence that passwords are encrypted (non-reversible).	
Purpose: The purpose of this test is to verify that the voting system shall store passwords in a non-reversible format.	Prerequisites:							
Test Procedures: Search for password storage	Variances Used During Testing:							
Test Expected Outcome The voting system shall produce evidence that passwords are encrypted (non-reversible).								

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations:

Password is stored encrypted in the local database

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Michael L. Chodwell

Printed name

John G. Brown

Printed name

T Bishop

Signature

7-26-07

Date

Michael L. Chodwell

Signature

8-14-07

Date

[Signature]

Signature

8/15/07

Date

BA4-P3-405 07-26-07.001

Microsoft Access

File Edit View Insert Format Records Tools Window Help

2007 co certification coor audio 194w : Database (Access)

Operator : Table

KeyId	Label	FullName	Password	AccessLevel	RegionId	ExportId
▶	admin	admin	bl02apVgC8unw	0	0	
*						

Record: 14 1 of 1

Datasheet View

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Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 406

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Rule or Statute 45.5.2.6.1(a)(i)	2007-CDOS-DIE-001-0402	Test Number BA4-P3-406
	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: The operating system administrative account does not have access to the database and does not have the ability or knowledge of the database administrator password;	Test Date
Cross Reference 1		Test End Date/Time
Cross Reference 2		Test Type (D/F/B) Functional
Cross Reference 3		Eq Type Software
		Equipment Model GEMS 1-18-24
		Serial Number
		Manufacturer Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The operating system administrative account shall not have access to the database or the database administrative password.

Prerequisites:

Test Procedures:

See Trusted Build

Variances Used During Testing:

Test Expected Outcome

The voting system security architecture allows for completely separate OS and DB accounts that do not have the ability nor knowledge of each other's passwords.

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations: GEMS 1-18-24 uses a Microsoft Access database engine. If Microsoft Access is not loaded on the GEMS server and industry standards for password & user security and accounts is adhered to the system will remain secure.

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael L. Chadwell
Printed name

Printed name

T Bishop 7-23-07
Signature Date

Michael L. Chadwell 8-14-07
Signature Date

Signature Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 407

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Environment		2007-CDOS-DIE-001-0402		Test Number
ction - Voting - Post				BA4-P3 - 407
Test Log				
Date	Time	Operator	Activities and Entries	Incident Reports
7-23		WS	<p>Verified by the creation of a new user account with limited access to election duties and abilities. This account does not have full administrative access. This account may not create new users, change election data, and may run reports.</p> <p>ELECTION DATABASE - Recall Election</p> <p>USER: NEW USER</p> <p>PASSWORD: TEST</p> <p>Blank password was attempted and not allowed - Even trapped by voting system</p>	

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

Continue to next
page...

Additional Observations and Findings

Observations:

Blank password for user account not allowed

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

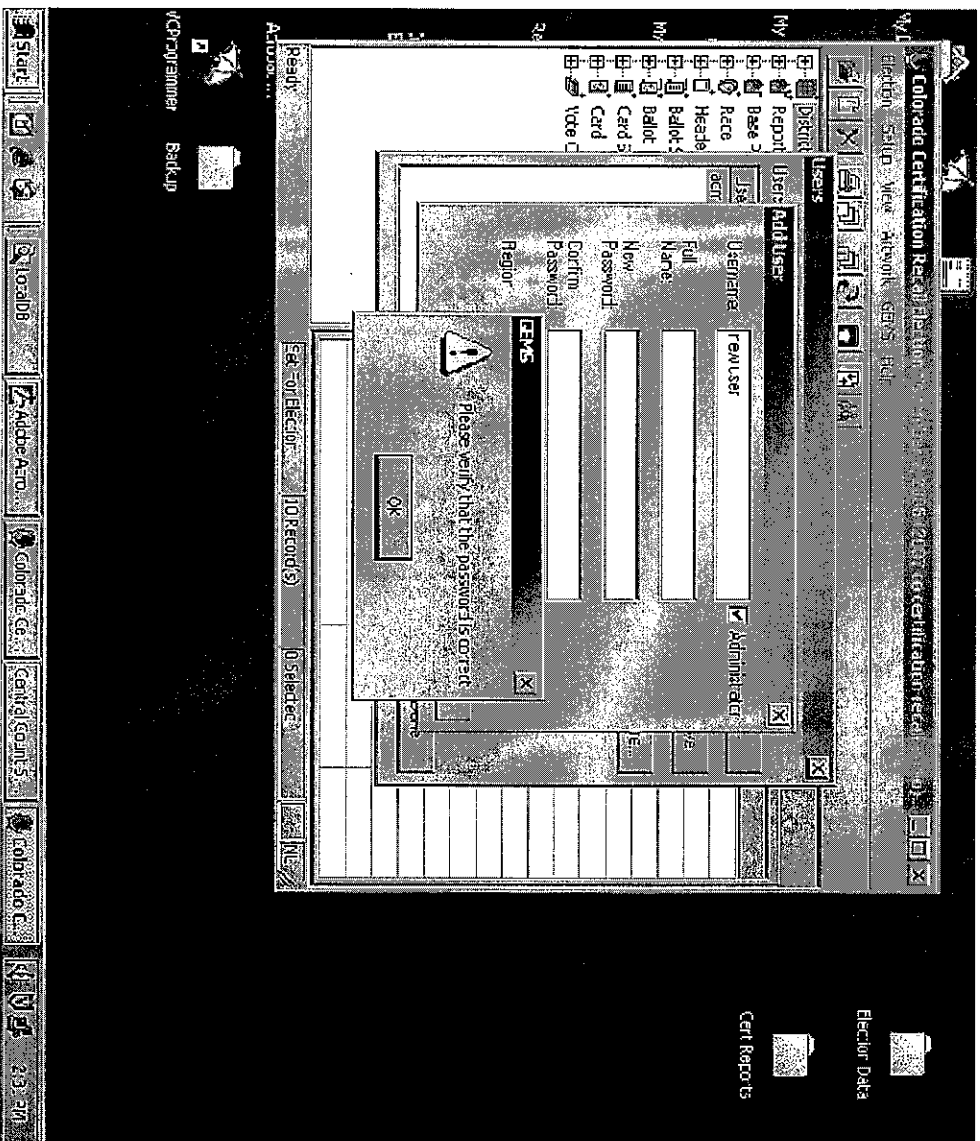
Michael H. Chadwell
Printed name

John G. Brown
Printed name

T Bishop
Signature
7-27-07
Date

Michael H. Chadwell
Signature
8-14-07
Date

[Signature]
Signature
8/15/07
Date



13A4-193-407 07-26-07.001

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Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 408

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(a)(v)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique application user/operator account shall be created with limited rights specifically designed to perform functional operation within the scope of the application. This user/operator shall be restricted in the creation or modification of any user/operator accounts.	BA4-P3-408
Cross Reference 1		Test Date
Cross Reference 2		Test End Date/Time
Cross Reference 3		Test Type (D.F.B)
		Functional
		Eq Type
		Software
	Equipment Model	GEMS 1-18-24
	Serial number	
	Manufacturer	Diebold
Test Procedure Specification		
<div> <div> Purpose: The purpose of this test is to verify that the use of any administrative account password shall not be used for any normal operating functions at any remote location. </div> <div> Prerequisites: BA4-P3-407 </div> </div>		
<div> <div> Test Procedures: SEE BA4-P3-407 </div> <div> Variances Used During Testing: </div> </div>		
Test Expected Outcome		
The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. Administrative account password shall be able to be changed as often as needed without voting system provider assistance.		

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

Verified during BA4-P3-407

Findings:

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael L. Crowell
Printed name

John GORDON
Printed name

T Bishop 7-23-07
Signature Date

Michael L. Crowell 8-14-07
Signature Date

[Signature] 8/15/07
Signature Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: **Diebold Election Systems**

Application Date: **04/02/2007**

Test Number

BA4-P3 - 409

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(a)(iii)(c)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique System User/operator account shall be created for operating system use that is restricted from the following aspects of the operating system: No access to install or remove programs.	BA4-P3-409
Cross Reference 1		Test Date
		7/23
Cross Reference 2		Test End Date/Time
		8/15
Cross Reference 3		Test Type (D/F/B)
		Functional
		Eq Type
		Software
		Equipment Model
		GEMS 1-18-24
		Serial number
		P/A
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system shall contain a unique system user account with permissions described herein.

Prerequisites:

Test Procedures:

See Trusted Build

Variances Used During Testing:

Test Expected Outcome

The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. User/Operator accounts have no privileges to install and/or remove programs.

Test Log

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

[illegible]

Additional Observations and Findings

Observations:

Verified during Trusted Build. Limited access and the ability to remove & install programs is a Windows 2000 server function that adheres to industry standards of user accounts & system access.

Findings:

1st Review

2nd Review

Supervisor Approval

V. Bishop
Printed name

Michael L. Caldwell
Printed name

Printed name

V. Bishop 7-23-07
Signature Date

Michael L. Caldwell 8-14-07
Signature Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 410

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(a)(vi)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: Voting system provider shall not have administrative account, or administrative account access.	BA4-P3-410
Cross Reference 1		Test Date
Cross Reference 2		Test End Date/Time
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		Software
		Equipment Model
		GEMS 1-18-24
		Serial number
	Manufacturer	
	Diebold	
Test Procedure Specification		
<div> <div> <u>Purpose:</u> The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The voting system provider shall not have an administrative account, or administrative level access. </div> <div> <u>Prerequisites:</u> </div> </div>		
<div> <div> <u>Test Procedures:</u> SEE TRUSTED BUILD </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
Test Expected Outcome		
The voting system provider will not have access to the system once the system has been installed and access passwords have been changed by the local election official.		

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

Continue to next page...

Additional Observations and Findings

Observations:

Verified during Hunted Build, & GEMS setup, Voting System allows for Administrator (or system) to change Passwords for this Requirement.

Findings:

Access privileges are defined by end user, and controlled

1st Review

2nd Review

Supervisor Approval

T.B. Shaw

Printed name

Michael L. Cunnell

Printed name

Printed name

Tim Binkley

Signature

7.23.07

Date

Michael S. Chadwell

Signature

8.14.07

Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 411

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(e)(iii)	The voting system shall meet the following requirements for password security: Password to database shall be owned and only known by application;	BA4-P3-411
		Test Date
		Test End Date/Time
Gross Reference 1		Test Type (D,F,B)
		Functional
		Eq Type
		Software
Gross Reference 2		Equipment Model
		GEMS 1-18-24
		Serial number
Gross Reference 3		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the password to the database is known only by the application.

Prerequisites:

Test Procedures:

See BA4-P3-408 ~~411~~ 6

Variances Used During Testing:

Test Expected Outcome

Access to the voting system database will be restricted by the use of a password that is known only by the voting system application.

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

Continue to next
page...

Additional Observations and Findings

Observations:

See BA4-P3-406

Although the GEMS election database files are of standard MS Access format and non-encrypted and contain a table listing of the GEMS application passwords, the password themselves ARE encrypted. See ATTACHMENT FROM

Findings:

System compliance depends on absence of third-party software not required for voting operations, i.e. MS Access

1st Review

2nd Review

Supervisor Approval

T Bishop

Printed name

Michael L. Chadwell

Printed name

Printed name

T Bishop

Signature

7-26-07

Date

Michael L. Chadwell

Signature

8.14.07

Date

Signature

Date

ELECTION DATABASE PASSWORD LIST - VIEWED IN MS ACCESS

Microsoft Access - [Operator: Table] Type a question for help

KeyID	Username	FEU Name	FEU Password	NAccessLevel	RegionID	ExpDate
1	admin	admin	b102apVgC8unw	0	0	
1	tim	tim	jKlmm1V5K9KA	1	1	
			ENCRYPTED			

1 of 2 records

310.01-204-03-465-8-
BA4-03-411-1

6-001 11.1.11.11

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Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 412

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(a)(ii)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: The operating system administrative account shall not be required to be used by any function of the voting system during normal operations;	BA4-P3-412
		Test Date
		Test End Date/Time
		Test Type (D-R-B)
		Functional
Cross Reference 1		Eq Type
		Software
Cross Reference 2		Equipment Model
		GEMS 1-18-24
Cross Reference 3		Serial number
		Manufacturer
		Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> The purpose of this test is to verify that the voting system provider shall implement an access control system of least privilege. The operating system administrative account shall not be required by any function of the voting system for normal operation </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <i>See Printed Build</i> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
Test Expected Outcome		
The voting system security architecture allows for class/subclass accounts accounts based on least privilege and role based access. The system administrative password is not needed for any function during normal operations.		

Test Log

Date	Time	Operator	Activities and Entries	Incident Reports
------	------	----------	------------------------	------------------

[illegible]

Additional Observations and Findings

Observations:

Verified during trusted Build, Lens setup, and
user account creation.

Findings:

operating system administrative is not required
for normal operation of

1st Review

2nd Review

Supervisor Approval

T. Bishop
Printed name

Michael L. Chidwell
Printed name

Printed name

T. Bishop
Signature

2-26-07
Date

Michael L. Chidwell
Signature

8-11-07
Date

Signature

Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 413

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Rule or Statute	2007-CDOS-DIE-001-0402	Test Number
45.5.2.6.1(a)(iii)(a)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique System User/operator account shall be created for operating system use that is restricted from the following aspects of the operating system: No Access to System Root directory.	BA4-P3-413
Cross Reference 1		Test Date
		8/3
Cross Reference 2		Test End Date/Time
		8/15
Cross Reference 3		Test Type (D,F,B)
		Functional
		Eq Type
		Software
		Equipment Model
		GEMS 1-18-24
		Serial number
		172
		Manufacturer
		Diebold

Test Procedure Specification

Purpose:

The purpose of this test is to verify that the voting system shall contain a unique system user account with permissions described herein.

Prerequisites:

Test Procedures:

See Trusted Build

Variances Used During Testing:

Test Expected Outcome

The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. User/Operator accounts have no access to system root directory.

Test Log

[illegible]

[illegible]

Attachments					
Documents (list all documents) <i>None Attached.</i>	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>	Videos (list all videos)	No <input type="checkbox"/> Yes <input type="checkbox"/>	Photos (list all photos)	No <input type="checkbox"/> Yes <input type="checkbox"/>

Acceptable Compensating Controls

Results Summary	Final Test Status
Test Meets Expected Outcome	P

1st Review		2nd Review		Supervisor Approval	
<u>T. B. Swan</u>		<u>Michael L. Chadwell</u>		<u>John G. Brown</u>	
Printed name		Printed name		Printed name	
<u>Tim B. Swan</u>	<u>8-3-07</u>	<u>Michael L. Chadwell</u>	<u>8-14-07</u>	<u>John G. Brown</u>	<u>8/15/07</u>
Signature	Date	Signature	Date	Signature	Date

Additional Observations and Findings

Observations:

Verified during Limited Build & Tests setups -
This is of function of Windows Server 2003 - COTS
Created windows user -
limited access for this user -
~~was~~ logged on as user
access was denied to root directory
Voting System was accessible.

Findings:

This is of function of Windows Server 2000 - user
privileges and is COTS.

1st Review

2nd Review

Supervisor Approval

T. Bishop

Printed name

Michael L. Crowell

Printed name

John G. Gorman

Printed name

T. Bishop

Signature

8-3-07

Date

Michael L. Crowell

Signature

8-14-07

Date

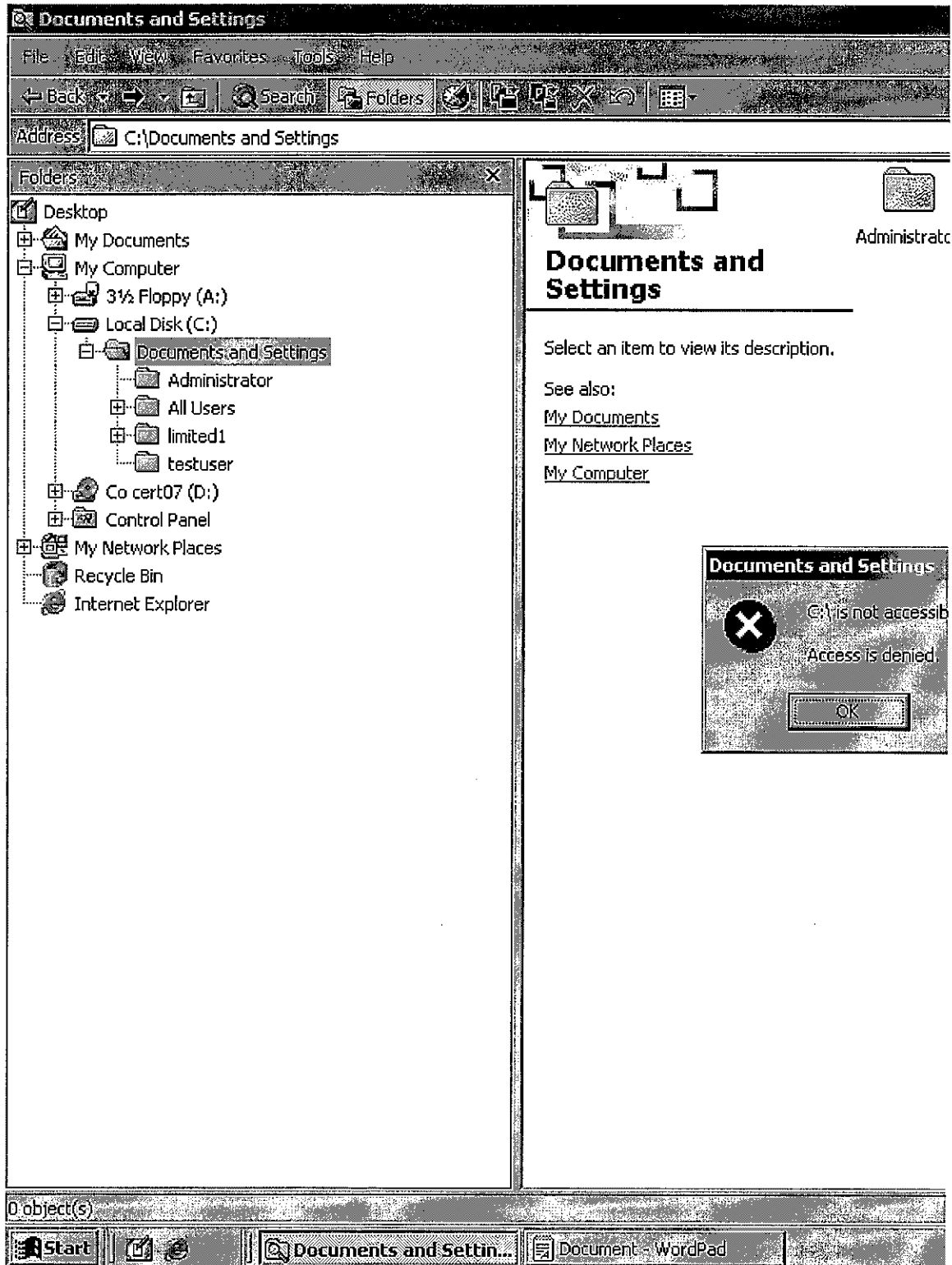
John G. Gorman

Signature

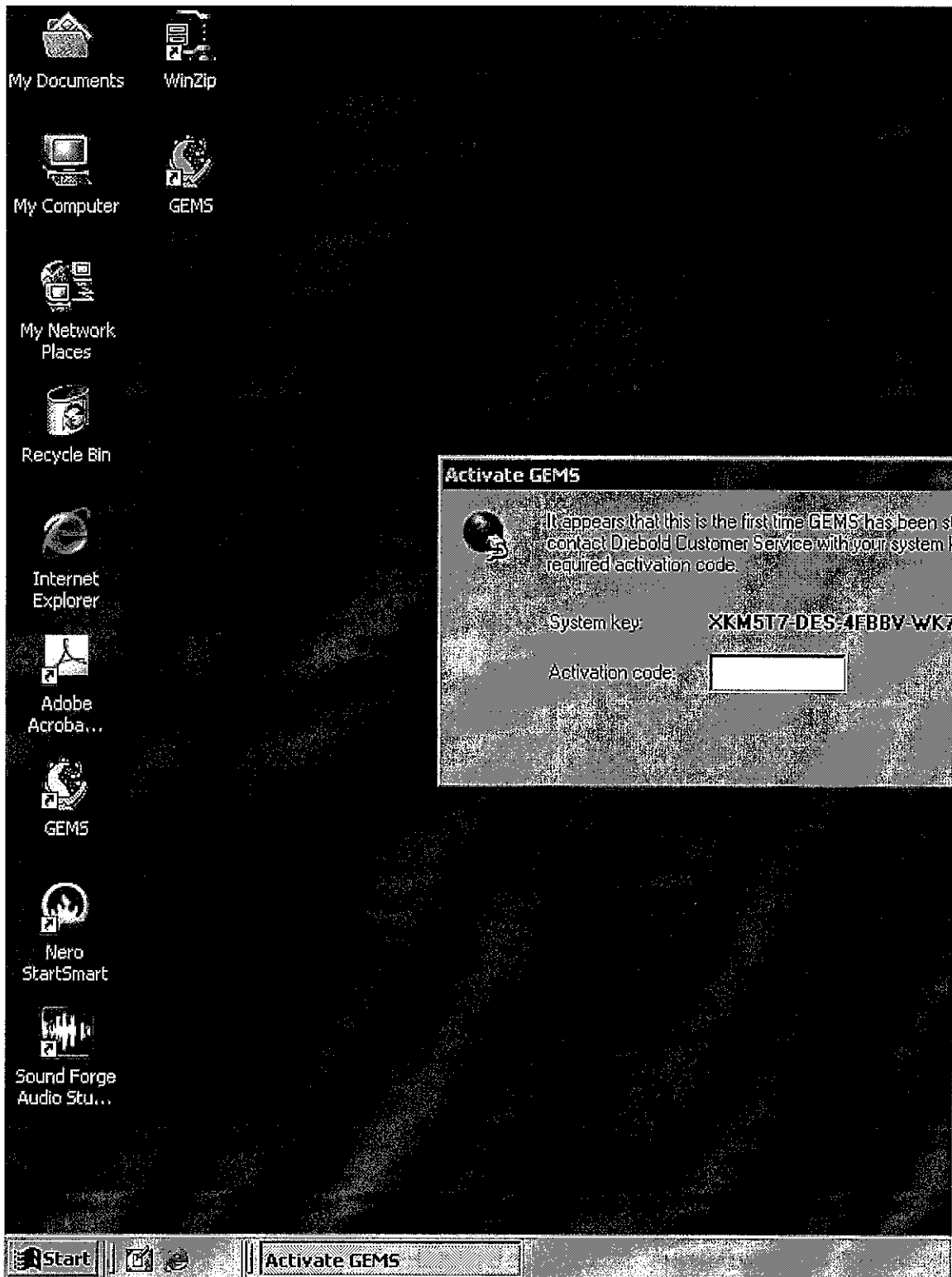
8/15/07

Date

BA4-PS-415 8-5-07.001



BA4-P3-413 8-33-07. 002



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1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

Application Date: *04/02/2007*

Test Number

BA4-P3 - 414

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(a)(iii)(b)	The voting system shall accommodate a general system of access by least privilege and role based access control. The following requirements shall apply: A unique System User/operator account shall be created for operating system use that is restricted from the following aspects of the operating system: No access to operating system specific folders.	BA4-P3-414
Cross Reference 1		Test Date 8/14
Cross Reference 2		Test End Date/Time 8/14
Cross Reference 3		Test Type (D/F/B) Functional
		Eq Type Software
		Equipment/Model GEMS 1-18-24
		Serial number P/A
		Manufacturer Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> <p>The purpose of this test is to verify that the voting system shall contain a unique system user account with permissions described herein.</p> </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <p>See trusted build</p> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
<u>Test Expected Outcome</u> <p>The voting system security architecture allows for class/subclass accounts based on least privilege and role based access. User/Operator accounts have no access to OS specific folders.</p>		

Test Log

Date	Time	Operator	Activities and Entries	Incident Reports
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[illegible]

[illegible]

Attachments								
Documents (list all documents)	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Videos (list all videos)	No <input type="checkbox"/>	Yes <input type="checkbox"/>	Photos (list all photos)	No <input type="checkbox"/>	Yes <input type="checkbox"/>

Acceptable Compensating Controls

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Results Summary	Final Test Status
Test Meets Expected Outcome	✓

1st Review		2nd Review		Supervisor Approval	
<u>T. Bishop</u>		<u>Michelle L. Crowder</u>		<u>He Gardner</u>	
Printed name		Printed name		Printed name	
<u>Pat Risher</u>	<u>7-26-07</u>	<u>Michael H. Chodwell</u>	<u>8.14.07</u>	<u>[Signature]</u>	<u>8/14/07</u>
Signature	Date	Signature	Date	Signature	Date

Additional Observations and Findings

Observations:

Verified during Printed Build, GEMS setup & user account setup. This is a function of Windows 2000 Server and an industry standard procedure to limit ~~acc~~ system access per user accounts.

Findings:

The Voting System Meets this Requirement by use of Windows 2003 Server operating System

1st Review

2nd Review

Supervisor Approval

T. Bishop
Printed name

Michael L. Cunniff
Printed name

John Gardner
Printed name

T. Bishop 7-26-07
Signature Date

Michael L. Cunniff 8-14-07
Signature Date

John Gardner 8/15/07
Signature Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

CDOS Certification Number: **2007-CDOS-DIE-001-0402**

Manufacturer: *Diebold Election Systems*

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Test Number

BA4-P3 - 415

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2007-CDOS-DIE-001-0402		Test Number
Rule or Statute 45.5.2.6.1(e)(vii)	The use of blank or empty passwords shall not be permitted at any time with the exception of a limited one-time use startup password which requires a new password to be assigned before the system can be used.	BA4-P3-415
		Test Date
		Test End Date/Time
		Test Type (D/F/B)
		Functional
Cross Reference 1		Eq Type
		Software
Cross Reference 2		Equipment Model
		GEMS 1-18-24
		Serial Number
Cross Reference 3		Manufacturer
		Diebold
Test Procedure Specification		
<div> <div> <u>Purpose:</u> <p>The purpose of this test is to verify that the voting system and operating system can not and do not use blank or empty passwords at any time.</p> </div> <div> <u>Prerequisites:</u> </div> </div> <div> <div> <u>Test Procedures:</u> <p>CREATE USER ACCOUNT WITH A BLANK PASSWORD</p> </div> <div> <u>Variances Used During Testing:</u> </div> </div>		
<u>Test Expected Outcome</u> <p>The voting system and operating system shall be configured to prevent the use of null passwords.</p>		

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarting, stop and restoring the system as necessary.

Continue to next
page...

Additional Observations and Findings

Observations: *See BA4-P3-407*

Findings:

The Voting System Software Meets this Requirement.

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael L. Crowell
Printed name

John Gervase
Printed name

T Bishop 7-23-07
Signature Date

Michael L. Crowell 8-14-07
Signature Date

[Signature] 8/14/07
Signature Date

State of Colorado
Department of State
1700 Broadway
Suite 250
Denver, CO 80290



Mike Coffman
Secretary of State

Holly Lowder
Director of Elections

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Test Number

BA4-P3 - 416

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2007-CDOS-DIE-001-0402		Test Number								
Rule or Statute 45.5.2.6.1(e)(ii)	The voting system shall meet the following requirements for password security: Passwords to database shall not be stored in database.	BA4-P3-416								
		Test Date 7.30.07								
		Test End Date/Time 7.30.07								
Cross Reference 1		Test Type (D.F.B) Functional								
		Eq Type Software								
Cross Reference 2		Equipment Model GEMS 1-18-24								
		Serial number MA								
Cross Reference 3		Manufacturer Diebold								
Test Procedure Specification										
<table border="1"> <thead> <tr> <th>Purpose:</th> <th>Prerequisites:</th> </tr> </thead> <tbody> <tr> <td> The purpose of this test is to verify that the voting system does not store passwords in the database of the application. </td> <td></td> </tr> <tr> <td> Test Procedures: SEARCH DATABASE FOR PASSWORDS </td> <td> Variances Used During Testing: </td> </tr> <tr> <td colspan="2"> Test Expected Outcome The voting system does not store passwords to the database within the database. </td> </tr> </tbody> </table>			Purpose:	Prerequisites:	The purpose of this test is to verify that the voting system does not store passwords in the database of the application.		Test Procedures: SEARCH DATABASE FOR PASSWORDS	Variances Used During Testing:	Test Expected Outcome The voting system does not store passwords to the database within the database.	
Purpose:	Prerequisites:									
The purpose of this test is to verify that the voting system does not store passwords in the database of the application.										
Test Procedures: SEARCH DATABASE FOR PASSWORDS	Variances Used During Testing:									
Test Expected Outcome The voting system does not store passwords to the database within the database.										

The test log shall contain procedural steps used to conduct and evaluate the tests. At a minimum, these procedural steps shall include any items related to the setup, start, process, measurements, shut down, retarding, stop and restoring the system as necessary.

[illegible]

[illegible]

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Date _____

Additional Observations and Findings

Observations:

Voting system passwords are stored in local
database - see BA4-P3-406
BA2-P3-213
BA4-P3-405

Findings:

The voting system software stores passwords within the
MS ACCESS DATABASE.

1st Review

2nd Review

Supervisor Approval

T Bishop
Printed name

Michael L. Chadwell
Printed name

John Gardner
Printed name

T Bishop
Signature

2-23-07
Date

Michael L. Chadwell
Signature

8-14-07
Date

John Gardner
Signature

8/15/07
Date