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TEST REPORT ADDENDUM

NATIONAL CERTIFICATION TEST REPORT ADDENDUM

CERTIFICATION TESTING OF THE DOMINION DEMOCRACY SUITE VERSION 4.14-A.1 VOTING SYSTEM

EAC CERTIFICATION NUMBER – DVS-DemSuite4.14-A.1

for

Dominion Voting Systems, Inc.
1201 18th Street, Suite 210
Denver, Colorado 80202

STATE OF ALABAMA }
COUNTY OF MADISON }

Robert D. Hardy, Department Manager, being duly sworn, deposes, and says: The information contained in this report is the result of complete and carefully conducted testing and is to the best of his knowledge true and correct in all respects

Robert Hardy

NTS Huntsville shall have no liability for damages of any kind to person or property, including special or consequential damages, resulting from NTS Huntsville providing the services covered by this report.

PREPARED BY: Jon Stevenson 6-9-2014
Jon Stevenson, Project Engineer Date

APPROVED BY: Frank Padilla 6-9-2014
Frank Padilla, Voting Systems Manager Date

NTS Huntsville Q. A.: Ronda Mason 6/9/14
Ronda Mason, Q. A. Manager Date

SEAL

Subscribed and sworn to before me this 10 day of June 2014
Sandra A. Plambeck
Notary Public in and for the State of Alabama at Large



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EAC Lab Code 0704

My Commission expires June 2, 2015



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1.0 INTRODUCTION

This Test Report is an addendum to the previously approved Dominion Democracy Suite 4.14-A.1 Test Report, Rev. B.

1.1 Scope

The scope of this Addendum included a new trusted build of the EMS component, and functional testing to confirm the following:

1. Trusted Build – Reviewed and applied a post-processing script that allowed for proper code obfuscation of the functional modifications noted below. The primary EMS source code and 3rd-party tools were not modified for the trusted build.
2. Functional Testing – Verified the expected functionality of the components listed below. The modifications required a re-installation of the Application Server software, Election Event Designer software, and Audio Studio software.
 - a. Audio Studio (AS) Bulk Import – All audio files located in a specific folder can be imported into Audio Studio using the “Import Audio Files from Folder” function.
 - b. Election Event Designer (EED) Bulk Removal of Styling Templates – Multiple ballot styling templates, such as Ballot Header and Contest Header templates, can be removed from ballots.

1.2 Objective

The objective of this Addendum was to review the script provided by Dominion Voting Systems to ensure compliance with the EAC 2005 VVSG, perform a trusted build of the EMS component, and verify that the impacted Audio Studio and Election Event Designer changes functioned as documented in the Technical Data Package.

2.0 TEST PROCEDURES AND RESULTS

The Dominion Voting Systems Democracy Suite 4.14-A.1 Voting System was subjected to the tests as summarized in this section.

2.1 Trusted Build

A trusted build of the EMS was performed by utilizing Dominion Voting Systems’ trusted build documentation. The trusted build included the addition of a script to obfuscate the source code for the EMS software.

The following steps were performed in the order listed by NTS Huntsville to complete the Trusted Build:

- Apply the EMS 4.14.2301 final build environment image file to the build server
- Execute the provided script to properly obfuscate the source code for the EMS
- Create a digital signature of executable code
- Create installation media
- Create a digital signature of the installation media

2.0 TEST PROCEDURES AND RESULTS (Continued)

2.1 Trusted Build (Continued)

- Install executable code onto the system and validate the software/firmware
- Deliver source code with digital signature, disk image of pre-build environment with digital signatures, disk image of post-build environment with digital signatures, executable code with digital signatures, and installation media to the EAC Repository.

2.2 Functional Testing

The functional testing encompassed an examination of the items submitted for this Test Report Addendum. The summary findings are presented below.

1. Audio Studio Bulk Import – This functionality was tested to confirm that multiple audio files can be successfully imported into Audio Studio. An election project containing existing audio files was utilized, whereby the existing files were overwritten by using the function “Import Audio Files from Folder.” Five audio files were created using Windows 7 Voice Recorder, named according to the filenames identified in the EMS report “Audio Studio File Names,” and imported into Audio Studio. Upon successful completion of the import process, each audio file was played back using Audio Studio to confirm the new audio was present.
2. Election Event Designer Bulk Removal of Styling Templates – This functionality was tested to confirm multiple ballot styling template dependencies used during the election creation process could be removed. The types of dependencies are based on the purpose of the template, and are shown below.

Template Type	Dependency
Ballot Header	Ballot styles associated with the election
Contest Header	Contests associated with the election
Choice	Candidates (Choices) for each contest in the election

The previous functionality only allowed up to four templates to be removed at once. After the change was applied, the functionality was confirmed to allow the removal of five or more dependencies at once. This was accomplished by highlighting multiple dependencies associated with each Template Type, then clicking the “Remove” button.

3.0 Recommendation for Certification

NTS Huntsville performed additional testing on the previously-approved Dominion Voting Systems Democracy Suite 4.14-A.1 System (EAC Certification Number – DVS-DemSuite4.14-A.1). Functional testing revealed that the submitted changes functioned as documented in the Dominion Democracy Suite Technical Data Package.

<END OF ADDENDUM>