CDOS Certification Number: 2007-CDOS-HAR-001-0404

Manufacturer: Hart Intercivic

Application Date: 04/04/2007

Test Number

BE2-P3 - 207
2007-CDOS-HAR-001-0404

Rule or Statute:
45.5.2.7.4

All wireless components on voting systems shall be disabled with the exception of line of sight infrared technology used in a closed environment where the transmission and reception is shielded from external infrared signals and can only accept infrared signals generated from within the system.

Test Number:
BE2-P3-207

Test Date:
9/28/2007

Test End Date/Time:
9/28/2007

Test Type (D.P.B.):
Doc and Funct

Equipment Model:
eScan

Manufacturer:
Hart Intercolvic

Purpose:
The purpose of this test is to verify that the voting device has disabled all wireless components on the voting system as required herein.

Prerequisites:

Test Procedures:
Verify lack of wireless transmissions using Fluke Air Analyzer

Variances Used During Testing:

Test Expected Outcome:
Voting system contains no functional wireless components with the exception shielded line of sight infrared technology. The system does not generate nor accept any other wireless signals.
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, restarting, step and restoring the system as necessary.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Operator</th>
<th>Activities and Entries</th>
<th>Incident Report</th>
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<th>Attachments</th>
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Documents (list all documents) | No | Yes | Videos (list all videos) | No | Yes |
|-------------------------------|----|-----|--------------------------|----|-----|

Photos (list all photos) | No | Yes |

Acceptable Compensating Controls

Results Summary

TEST MEETS EXPECTED OUTCOME

- Pass

1st Review
T. Bishop

2nd Review
M. L. Choppard

Supervisor Approval
John Gardner

Printed name
Printed name
Printed name

Signature
Signature
Signature

Date
Date
Date

Created by the Colorado Secretary of State's Office
Observations:
See also notes in BE4-P3-406. The voting device does not have any wireless signals emitting from the device.

11-21-07 Addendum: See Fluke analysis attached to the above listed test. Notes indicate that all Hart devices are powered and the graphs do not indicate any wireless signals from any HART devices.

Attachments to referenced test (BE4-P3-406) also show steps of disabling wireless device and scan traces of remaining ambient transmissions.

Findings:
Voting system meets the requirements of this test.
CDOS Certification Number: **2007-CDOS-HAR-001-0404**

Manufacturer: **Hart Interivic**

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

**Test Number**

BE4-P3 - 402
Rule or Section: 45.5.2.6.1(b)(i)

The voting system shall meet the following requirements for network security: All components of the voting system shall include the limited use of non-routable IP address configurations for any device connected to the closed network. For the purposes of this requirement non-routable IP addresses are those defined in the RFC 1519 Address base.

<table>
<thead>
<tr>
<th>Test Number</th>
<th>BE4-P3-402</th>
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<tbody>
<tr>
<td>Test Date</td>
<td>9/29/2007</td>
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<tr>
<td>Test End Date/Time</td>
<td>9/29/2007</td>
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<td>Test Type (D,E,B)</td>
<td>Functional</td>
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<td>Test Type (D,E,B)</td>
<td>Software</td>
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<td>Equipment Model</td>
<td>System 6.0</td>
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<tr>
<td>Serial number</td>
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<td>Manufacturer</td>
<td>Hart Interacivic</td>
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**Purpose:**

The purpose of this test is to verify that the voting system uses non-routable IP addresses for any device connected to the closed network as required herein.

**Prerequisites:**

**Test Procedures:**

See notes on BE3-P3-309. Document the findings of using the device for telecommunication needs.

**Variance Used During Testing:**

**Test Expected Outcome:**

Voting system is capable of supporting a closed network containing non-routable IP addresses.
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, restarting, stop and restoring the system as necessary.

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<th>Activities and Events</th>
<th>Incident Reports</th>
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(Note: The table is empty and should be filled in with relevant data.)
The voting system was tested only with the stand alone ballot now. Other install versions are not to be used.

TEST MEETS EXPECTED OUTCOME W/ABOVE LISTED CONTROL  - Pass Conditional

<table>
<thead>
<tr>
<th>1st Review</th>
<th>2nd Review</th>
<th>Supervisor Approval</th>
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<tbody>
<tr>
<td>T. Bishop</td>
<td>Danny Casias</td>
<td>John Gardner</td>
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Printed name

Signature  Date  Signature  Date  Signature  Date
Observations:
See notes on BE3-P3-309. The software does not require any network connections for functioning provided the "network" version of ballot now is not used.

11-21-07 Addendum: The network version of Ballot Now was not submmitted for certification. All other compoenets of the HART system do not require any network connections to function. Laptops that have SERVO installed must be set to IP 192.168.0.XXX (IP configuration is limited by the voting system to the noted range) to allow communication / reset of eSlate, eScan, JBC.

Findings:
The voting system meets the test requirements provided the "stand alone" version of Ballot Now is used.
CDOS Certification Number: 2007-CDOS-HAR-001-0404

Manufacturer: Hart Intercivic

Application Date: 04/04/2007
2007-CDOS-HAR-001-0404

Purpose:
The purpose of this test is to verify that all components for the voting system are operated on a closed network as required in this rule.

Test Procedures:
Document the findings of the voting system processing ballots through all test cases and the network requirements necessary for normal operation.

Voting system is capable of supporting a closed network including only devices used for the voting system.
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, restarting, stop and restoring the system as necessary.

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Continue to next page...
The voting system was tested only with the stand alone ballot now. Other install versions are not to be used.

TEST MEETS EXPECTED OUTCOME W/ABOVE LISTED CONTROL

1st Review
T. Bishop

2nd Review
Deny Cases

Supervisor Approval
John Gardner

12-3-07
12-3-07
12-3-07
Observations:
The voting device uses "ballot now" software which was installed as a "stand alone" version of the software. This version requires no network connectivity for the workstation (or laptop/server, etc.) to operate under normal conditions. The networked version of the software does use standard windows networking protocols, but was not tested by the testing board. The stand alone function of the software is programmable by way of MBB only which is a more secure method of operation for the device.

11-21-07 Addendum: The network version of Ballot Now was not submitted for certification. All other components of the HART system do not require any network connections to function. Laptops that have SERVO installed must be set to IP 192.168.0.XXX (IP configuration is limited by the voting system to the noted range) to allow communication / reset of eSlate, eScan, JBC.

Findings:
The voting system meets the test requirements provided the "stand alone" version of Ballot Now is used.