EAC Certified System Technical Advisory – ESS2011-03

<table>
<thead>
<tr>
<th>EAC System(s) Affected:</th>
<th>ES&amp;S Unity 3.2.1.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component(s) Affected:</td>
<td>DS200</td>
</tr>
<tr>
<td>Version(s) Affected:</td>
<td>DS200 firmware version 1.4.3.11 (Unity 3.2.1.0)</td>
</tr>
<tr>
<td>Advisory Release Date:</td>
<td>July 28, 2011</td>
</tr>
<tr>
<td>Summary:</td>
<td>During local acceptance testing a DS200 Ballot Scanner failed to count a marked ballot position resulting in a lost vote.</td>
</tr>
</tbody>
</table>

Advisory:
Jurisdictions currently with, or considering upgrading/purchasing, the Election Systems & Software (ES&S) Unity 3.2.1.0 voting system should be aware that during local acceptance testing of the Unity 3.2.1.0 system, a DS200 Ballot Scanner failed to count a marked ballot position resulting in a lost vote.

Issue Description:
During testing on the Unity 3.2.1.0, a DS200 did not count a valid mark for a race. The anomaly was discovered when county testers reviewed the printed election summary report for the DS200 unit. The count for a single contest did not match the expected results. The test was performed to verify that ES&S had corrected a previous anomaly with similar symptoms. The county testers were using a 17” ballot with contests concentrated in the lower sections of the ballot (see Appendix A).

Root Cause:
In discussion with the EAC, ES&S stated that they have only been able to replicate this issue in testing by removing the plastic guides and physically altering the ballot (cutting of a corner).

EAC Comments:
In an effort to understand the issue the EAC focused on reviewing ballot images from several states and previous test campaigns. The review included 11”, 14”, 17” and 19” ballots. In the course of the review, the EAC found various degrees of ballot image distortion; with the 17” ballot having the largest degree of skew (see Appendix B). The EAC is working with jurisdictions, VSTLs and the manufacturer to understand and resolve this issue.

Recommended Procedures:
No recommend procedures at this time.

Notice Questions:
Please direct any question on this notice to the Election Assistance Commission Testing and Certification Division at 202-566-3100.
Appendix A – Image of ballot with dropped vote
PROPOSED TAX LEVY (ADDITIONAL) COUNTY

A majority affirmative vote is necessary for passage

An additional tax for the benefit of the Brecksville Broadview Heights City School District for the purpose of current expenses at a rate not exceeding 9.3 mills for each one dollar of valuation, which amounts to 53 cents for each one hundred dollars of valuation, for five years, commencing in 2011, first due in calendar year 2012.

---

PROPOSED TAX LEVY (ADDITIONAL) COUNTY

A majority affirmative vote is necessary for passage

An additional tax for the benefit of the Strongsville City School District for the purpose of current expenses at a rate not exceeding 9.9 mills for each one dollar of valuation, which amounts to 99 cents for each one hundred dollars of valuation, for a continuing period of time, commencing in 2011, first due in calendar year 2012.

---

PROPISTA PARA RECAUDACIÓN DE IMPUESTOS (ADICIONAL) CONDADO

Se requiere un voto afirmativo por mayoría para su aprobación

Un impuesto adicional que beneficiará al Distrito Escolar de la Ciudad de Brecksville-Broadview Heights con el fin de cubrir los gastos actuales sin exceder 9.3 milésimos por cada dólar de valuación, lo cual representa 53 centavos por cada cien dólares de valuación, por cinco años, comenzando en 2011, con su primer vencimiento en el año calendario del 2012.

YES / SI

NO / NO

---

PROPISTA PARA RECAUDACIÓN DE IMPUESTOS (ADICIONAL) CONDADO

Se requiere un voto afirmativo por mayoría para su aprobación

Un impuesto adicional que beneficiará al Distrito Escolar de la Ciudad de Strongsville con el fin de cubrir los gastos actuales sin exceder 9.9 milésimos por cada dólar de valuación, lo cual representa 99 centavos por cada cien dólares de valuación, por un periodo continuo, comenzando en el 2011, con su primer vencimiento en el año calendario del 2012.

YES / SI

NO / NO
17 inch target area zoomed in

YES / SI

NO / NO
Appendix B – Examples of ballot Images
### Straight Party
- American
- Communist
- Constitution
- Democrat
- Green
- Labor
- Libertarian
- Republican

### Representative in Congress
Vote for one
- Ben Baker
  - American
- Edwin Lewis
  - Communist
- Frank L. Matthews
  - Constitution
- Gale Smith
  - Democrat
- James A. Clark
  - Green
- Ken Anderson
  - Labor
- Leo Cross
  - Libertarian
- Theodore Judd
  - Republican
- Write-in

### Associate Judge of Court of Appeals
Vote for one
- Ala Dee Smith
  - American
- Calvin Marino
  - Communist
- David Cox
  - Constitution
- Eugene Ruff
  - Democrat
- Kerry Jones
  - Green
- Mildred Dudo
  - Labor
- Philip Thorp
  - Libertarian
- Thomas Reiss
  - Republican
- Write-in

### President of the United States
Vote for one
- Barbara Barrett Hicks
  - American
- Edris Thomas
  - Communist
- Fiero Finn
  - Constitution
- Gail Keefe
  - Democrat
- Imran Rashid
  - Green
- Jack "Duke" Broadsky
  - Labor
- Kay Raab
  - Libertarian
- Sam Patel
  - Republican
- Write-in

### State Assembly
Vote for one
- Betty Williams
  - American
- Elizabeth Mack
  - Communist
- Frank Pearson
  - Constitution
- Gary Klemann
  - Democrat
- James Ayers
  - Green
- Kenneth Interlicchio
  - Labor
- Leon Lewis
  - Libertarian
- Theodore Kopp
  - Republican
- Write-in

### County Commissioner
Vote for one
- Brent Gilley
  - American
- Elizabeth Piazza
  - Communist
- Franklin Margo
  - Constitution
- Gene Tillman
  - Democrat
- James Collins
  - Green
- Kerry Jones
  - Labor
- Lewis Tese
  - Libertarian
- Tony Grzanich
  - Republican
- Write-in

### United States Senator
Vote for one
- Barry Josey
  - American
- Edwin Best
  - Communist
- Floyd W. Schisler
  - Constitution
- Gail Ross
  - Democrat
- Jack Hall
  - Green
- Keith Satterwhite
  - Labor
- Laurie St Laurent
  - Libertarian
- Teddy Rogers
  - Republican
- Write-in

### State Supreme Court Justice
Vote for one
- Bruce Willis
  - American
- Ernst Lynch
  - Communist
- Glenn T Combs
  - Constitution
- Herbert Schweppenhauser
  - Democrat
- Linda Hall
  - Green
- Michael McClelland
  - Labor
- Philip Thorp
  - Libertarian
- Eugene Kassier
  - Republican
- Write-in

### County Comptroller
Vote for one
- Brian Edwards
  - American
- Eric Sheehy
  - Communist
- George A. Fisk
  - Constitution
- Helens Slack
  - Democrat
- Lewis Toshay
  - Green
- Mary L. Daniel
  - Labor
- Nydia E Hamblin
  - Libertarian
- Charles Place
  - Republican
- Write-in

310 of 372
Libertarian
Charles Place
Republican
Write-in
Straight Party

- American
- Communist
- Constitution
- Democrat
- Green
- Labor
- Libertarian
- Republican

Representative in Congress
Vote for one
- Ban Baker
  American
- Edwin Lewis
  Communist
- Frank L. Matthews
  Constitution
- Gale Smith
  Democrat
- James A. Clark
  Green
- Ken Anderson
  Labor
- Leo Cross
  Libertarian
- Theodore Judd
  Republican
- Write-in

Associate Judge of Court of Appeals
Vote for one
- Ala Dee Smith
  American
- Calvin Marino
  Communist
- David Cox
  Constitution
- Eugene Ruff
  Democrat
- Kerry Jones
  Green
- Mildred Dudo
  Labor
- Philip Thorp
  Libertarian
- Thomas Reiss
  Republican
- Write-in

President of the United States
Vote for one
- Barbara Barnett Hicks
  American
- Edris Thomas
  Communist
- Fiero Finn
  Constitution
- Gail Keefe
  Democrat
- Imran Rashid
  Green
- Jack "Duke" Brodsky
  Labor
- Kay Raab
  Libertarian
- Sam Patel
  Republican
- Write-in

State Assembly
Vote for one
- Betty Williams
  American
- Elizabeth Mack
  Communist
- Frank Pearson
  Constitution
- Gary Klemm
  Democrat
- James Ayers
  Green
- Kenneth Interichio
  Labor
- Leon Lewis
  Libertarian
- Theodore Kopp
  Republican
- Write-in

United States Senator
Vote for one
- Barry Jossey
  American
- Edwin Best
  Communist
- Floyd W. Schisler
  Constitution
- Gail Ross
  Democrat
- Jack Hall
  Green
- Keith Satterwhite
  Labor
- Laurie St Laurent
  Libertarian
- Tety Rogiers
  Republican
- Write-in

State Supreme Court Justice
Vote for one
- Bruce Willis
  American
- Ernst Lynch
  Communist
- Glenn T Combs
  Constitution
- Herbert Schweppenhauser
  Democrat
- Linda Hall
  Green
- Michael Mc Clelland
  Labor
- Philip Thorp
  Libertarian
- Eugene Kessler
  Republican
- Write-in

County Commissioner
Vote for one
- Brent Gilley
  American
- Elizabeth Piazza
  Communist
- Franklin Margo
  Constitution
- Gene Tillman
  Democrat
- James Collins
  Green
- Kerry Jones
  Labor
- Lewis Tese
  Libertarian
- Tony Grzaniuch
  Republican
- Write-in

County Comptroller
Vote for one
- Brian Edwards
  American
- Eric Sheehy
  Communist
- George A. Fisk
  Constitution
- Helena Slack
  Democrat
- Lewis Touhay
  Green
- Mary L. Daniel
  Labor
- Nydia E Hamblin
  Libertarian
- Charles Place
  Republican
- Write-in

29/ of 372
14 inch target area zoomed in

Libertarian

Charles Place Republican

Write-in
<table>
<thead>
<tr>
<th>Office</th>
<th>Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Assembly</td>
<td>Betty Williams, American</td>
</tr>
<tr>
<td></td>
<td>Elizabeth Mack, American</td>
</tr>
<tr>
<td></td>
<td>Frank Pearson, Constitution</td>
</tr>
<tr>
<td></td>
<td>Gary Klemann, Democrat</td>
</tr>
<tr>
<td></td>
<td>James Ayers, Green</td>
</tr>
<tr>
<td></td>
<td>Kenneth Interkochlo, Labor</td>
</tr>
<tr>
<td></td>
<td>Leon Lewis, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Theodore Klop, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>County Comptroller</td>
<td>Brian Edwards, American</td>
</tr>
<tr>
<td></td>
<td>Eric Shehy, Commissioner</td>
</tr>
<tr>
<td></td>
<td>George A. Feik, Commissioner</td>
</tr>
<tr>
<td></td>
<td>Holena Slack, Democrat</td>
</tr>
<tr>
<td></td>
<td>Lewis Touhey, Green</td>
</tr>
<tr>
<td></td>
<td>Mary L. Daniel, Labor</td>
</tr>
<tr>
<td></td>
<td>Nydia E. Hambin, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Charles Place, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>President of the United States</td>
<td>Barbara Barrett Hicks, American</td>
</tr>
<tr>
<td></td>
<td>Edie Thomas, Comptroller</td>
</tr>
<tr>
<td></td>
<td>Fiore Firm, Constitution</td>
</tr>
<tr>
<td></td>
<td>Gail Keefe, Democrat</td>
</tr>
<tr>
<td></td>
<td>Irwin Rashad, Green</td>
</tr>
<tr>
<td></td>
<td>Jack &quot;Duke&quot; Brodsky, Librarian</td>
</tr>
<tr>
<td></td>
<td>Kay Robb, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Sam Patel, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>United States Senator</td>
<td>Barry Jexey, American</td>
</tr>
<tr>
<td></td>
<td>Edwin Past, American</td>
</tr>
<tr>
<td></td>
<td>Floyd W. Schuler, Candidate</td>
</tr>
<tr>
<td></td>
<td>Gall Ross, Democrat</td>
</tr>
<tr>
<td></td>
<td>Jack Holl, Democrat</td>
</tr>
<tr>
<td></td>
<td>Keith Satterwhite, Librarian</td>
</tr>
<tr>
<td></td>
<td>Laurie St. Lauren, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Tudy Rogers, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>Judge of Court of Appeals</td>
<td>Alta Dee Smith, American</td>
</tr>
<tr>
<td></td>
<td>cabin Marino, Community</td>
</tr>
<tr>
<td></td>
<td>David Cox, Constitution</td>
</tr>
<tr>
<td></td>
<td>Eugene Ruff, Green</td>
</tr>
<tr>
<td></td>
<td>Kerry Jones, Green</td>
</tr>
<tr>
<td></td>
<td>Mildred Ouido, Labor</td>
</tr>
<tr>
<td></td>
<td>Philip Thomp, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Thomas Potts, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>Councilman District 2</td>
<td>Arthur Salamack, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Carter Ingman, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Derek Persman, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Elizabeth Piazza, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Franklin Mango, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Louis Kote, Jr, Nein Partisan</td>
</tr>
<tr>
<td></td>
<td>Mary L. Daniel, Nein Partisan</td>
</tr>
<tr>
<td>Representative in Congress</td>
<td>Ben Baker, American</td>
</tr>
<tr>
<td></td>
<td>Edwin Lewis, Commissioner</td>
</tr>
<tr>
<td></td>
<td>Franklin L. Matthews, Constitution</td>
</tr>
<tr>
<td></td>
<td>Gale Smith, Democrat</td>
</tr>
<tr>
<td></td>
<td>James A. Clark, Democrat</td>
</tr>
<tr>
<td></td>
<td>Ken Anderson, Labor</td>
</tr>
<tr>
<td></td>
<td>Leon Cross, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Theodore Judd, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
<tr>
<td>County Commissioner</td>
<td>Brant Giley, American</td>
</tr>
<tr>
<td></td>
<td>Elizabeth Piazza, Comptroller</td>
</tr>
<tr>
<td></td>
<td>Franklin Mango, Comptroller</td>
</tr>
<tr>
<td></td>
<td>Gane Tillman, Democrat</td>
</tr>
<tr>
<td></td>
<td>James Collins, Green</td>
</tr>
<tr>
<td></td>
<td>Kerry Jones, Labor</td>
</tr>
<tr>
<td></td>
<td>Lewis Tise, Libertarian</td>
</tr>
<tr>
<td></td>
<td>Tony Gruenich, Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
</tr>
</tbody>
</table>

19 inch ballot
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Leo Cross</strong></td>
<td>Libertarian</td>
</tr>
<tr>
<td></td>
<td>Theodore Judd</td>
<td>Republican</td>
</tr>
<tr>
<td></td>
<td>Write-in</td>
<td></td>
</tr>
</tbody>
</table>