



U.S. ELECTION ASSISTANCE COMMISSION

Voting System Testing and Certification Program

1201 New York Avenue, NW, Suite 300

Washington, DC. 20005

EAC Certified System Technical Advisory – ESS2011-02

EAC System(s) Affected:	ES&S Unity 3.2.1.0
Component(s) Affected:	DS200
Version(s) Affected:	DS200 firmware version 1.4.3.11 (Unity 3.2.1.0)
Advisory Release Date:	July 28, 2011
Summary:	During local acceptance testing in a jurisdiction multiple DS200 Ballot Scanners exhibited an anomaly where the touch screen interface would stop responding to touches.

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, touch screen interfaces on several DS200s stopped responding.

Issue Description:

During testing on the Unity 3.2.1.0 voting system, some DS200s stopped responding to interactions with the user interface. The anomaly presented itself at random times during the testing process.

Root Cause:

ES&S informed the EAC that the root cause of touch screen unresponsiveness is linked to an improperly implemented internal system log. This log is only accessible to ES&S technicians when troubleshooting errors with the fielded system. One specific event tracked by this log is the presence of the election media USB memory stick. If the unit is powered on without a memory stick inserted, the system records an event eight (8) times per second to the log. When the log reaches capacity, it causes a section of the internal compact flash (CF) card to become inaccessible. This same section of the CF card contains the calibration settings for the DS200's touch screen interface. When this section of the CF card is inaccessible the calibration settings are no longer available to the system so the screen becomes unresponsive.

ES&S Recommended Procedures:

ES&S recommends that jurisdictions do not power up a DS200 without an election media USB stick inserted.

Notice Questions:

Please direct any question on this notice to the Election Assistance Commission Testing and Certification Division at 202-566-3100.