

**Application Notes Affected:** No Application Notes

but this TB affects

WITS PSA Test Specification, all versions

Bulletin Reference: **TB0049 Iss 3**

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# 1 Overview

Errors been identified in 3 specific tests in the PSA Test Specification:

1. Section 2.9.1.8 tests the Field Device behaviour when a local user device is detached from the Field Device. The test specification states that the expected result is that the device generates a data set event with connection request (action 3). However, Application Note AN2005-005 states in table 2-7 that the data set is generated without a connection request. The test specification is in error and needs to be updated.
2. Section 2.9.1.10, testing the “log file filling” indication, also states an action 3 result which should be action 2.
3. Section 2.9.1.12, testing the “log file has discarded some information”, also states an action 3 result which should be action 2.

It has also been identified that a number of tests in section 2.9.2 are in fact repeats of tests already done in other sections. While it is convenient in section 2.9.2 to test all aspects of the device’s support for the HCDS when the device is both on-scan and off-scan the tests should not be repeats of previous tests. Section 2.9.2 of the Test Specification is re-worked to only include tests that are not performed in other parts of the document.

**NB.** In section 2 onwards, text that is shown in **red** represents words to be removed from the application notes and text in **blue** represents words to be inserted into the notes.

## 2 Changes to the WITS PSA Test Specifications

The following changes are made to all versions of the specification, generating revised versions as shown:

WITS-DNP3 protocol version	Current Test Specification	Revised Test Specification
1.1	WITS Test Specification Rev 1.1b	WITS Test Specification Rev 1.1c
1.2	WITS Test Specification Rev 1.2b	WITS Test Specification Rev 1.2c
1.3	WITS Test Specification Rev 1.3	WITS Test Specification Rev 1.3a
2.0	WITS Test Specification Rev 2.0a	WITS Test Specification Rev 2.0b
2.1	WITS Test Specification Rev 2.1	WITS Test Specification Rev 2.1a

### 2.1.1 Amend the revision details as shown:

Amend the date and revision on the front page to show the relevant revision and a date of August 2014.

Amend the document footer to show the relevant revision and a date of August 2014.

Change the copyright notice in the footer:

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Add an entry to the change history, dated August 2014 with the relevant revision and protocol version and details as shown:

Date	Revision	WITS-DNP3 Version	Details
August 2014			Correction to test 2.9.1.8, 2.9.1.10 and 2.9.1.12. Delete section 2.9.2 to remove tests already performed in previous sections and move some tests to section 2.6.

### 2.1.2 Amend test 2.9.1.8 as shown:

Test	Test procedure	Expected result
2.9.1.8	Remove a local user device to Field Device.	Local device attached cleared in HCDS data set event bit 4. Master Station to clear local use device attached alarm. Data set event with connection request (action 32).

### 2.1.3 Amend test 2.9.1.10 as shown:

Test	Test procedure	Expected result
2.9.1.10	Empty event log file to less than device profile defined limit. This can either be done in a Field Device specific manner or by a log file read from the Master Station.	Log file filling cleared in HCDS data set event bit 5. Master Station to clear log file filling alarm. Data set event with connection request (action 32).

#### 2.1.4 Amend test 2.9.1.12 as shown:

Test	Test procedure	Expected result
2.9.1.12	Remove overflow condition. This can either be done in a Field Device specific manner or by a log file read from the Master Station.	Log file has discarded information cleared in HCDS data set event bit 6. Master Station to clean log file information discarded alarm. Data set event with connection request (action 32).

#### 2.1.5 Delete section 2.9.2:

Section 2.9.2 can be deleted for the reasons shown below:

Test	Amendment	Reason
2.9.2.1	Delete this test	Repeat of tests 2.5.8.9 and 2.5.8.10
2.9.2.2	Delete this test	Repeat of test 2.5.8.11
2.9.2.3	Delete this test, but replicate it at the end of section 2.6.1	This test does not look at the HCDS. Section 2.6.1 is testing timed logs so move the test to this section of the specification.
2.9.2.4	Delete this test	Repeat of test 2.5.8.9
2.9.2.5	Delete this test	Repeat of test 2.5.8.13
2.9.2.6	Delete this test	Repeat of tests 2.5.8.15 and 2.5.8.16
2.9.2.7	Delete this test	This action is inferred in tests in 2.5.8.17 to 2.5.8.21
2.9.2.8	Delete this test, but replicate it at the end of section 2.6.1	This test does not look at the HCDS. Section 2.6.1 is testing timed logs so move the test to this section of the specification.
2.9.2.9	Delete this test	Repeat of test 2.5.8.15
2.9.2.10	Delete this test	Repeat of test 2.5.8.17
2.9.2.11	Delete this test	Repeat of 2.9.2.5

#### 2.1.6 Add tests to section 2.6 as shown:

In the test specifications for WITS-DNP3 protocol versions 1.1, 1.2 and 2.0:

2.6.1.7	<p>From the Master Station, download and activate an incremental configuration file to configure the device to be 'off-scan', using a Device On/Off Scan record (record type 0).</p> <p>From the Master Station:</p> <ul style="list-style-type: none"> <li>• Wait for at least a time such that in the device on-scan state the device would have logged data for the different source point types</li> <li>• Read the Field Device's WITS data log.</li> </ul>	<p>No samples are recorded in the WITS data log whilst the device is off-scan.</p>		
			Analogue input:	
			Analogue output:	
			Counter:	
2.6.1.8	<p>From the Master Station, download and activate an incremental configuration file to configure the device to be 'on-scan', using a Device On/Off Scan record (record type 0).</p> <p>From the Master Station:</p> <ul style="list-style-type: none"> <li>• Wait for at least a time such that the device will have logged data for the different source point types</li> <li>• Read the Field Device's WITS data log.</li> </ul>	<p>The correct samples are recorded in the WITS data log.</p>		
			Analogue input:	
			Analogue output:	
			Counter:	

In the test specifications for WITS-DNP3 protocol versions 1.3 and 2.1, include the two tests above but renumbered as 2.6.1.9 and 2.6.1.10 to allow for the fact that these versions of the specification already incorporated two new tests in section 2.6.1.