Innotek

DRINC

Server Test Document

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Tester: Date:

Table of contents

Revision history

Date	By	Description of changes
02-Feb-2014	DRINC Team	Initial Creation
28-Feb-2014	DRINC Team	Additional Information Added
7-Mar-2014	DRINC Team	Finished Interface Test Documentation

Tester: Date:

1 Test Information

Test type

___ Full Test ___ Regression Test

System Under Test

System name: _____ *Staple the recorder listing*

Version: _____ *of the configuration here*

Test Personnel

Name: Brandon Arnold_____ Date: 02-Feb-2014___ Time/h: _____

Name: Owen Ledvina_____ Date:02-Feb-2014____ Time/h: _____

Name: Hoang Phan_____ Date: 02-Feb-2014____ Time/h: _____

Name: Kyle Timins_____ Date:02-Feb-2014____ Time/h: _____

2 Test Summary

Results

Conclusion of the test: **PASS / FAIL**

Identifiers of the observations recorded:

_____

_____

Total number of cases failed: _____

Tester: Date:

3 Background

Purpose and Scope of the Test

This test procedure will consist of testing the various components of the Raspberry Pi system. The tests will include the hardware of the device, as well as the software components Apache2, and PostgreSQL.

The requirements document will be available at drinc.org/documentation/requirements.pdf

Additional Information

A list of bug reports for postgreSQL, which are beyond our capabilities to fix, available at http://www.postgresql.org/list/pgsql-bugs/

The bugzilla site for Apache2, which includes bugs beyond our capabilities to fix, available at https://issues.apache.org/bugzilla/

Experience required

- Understanding of Raspberry Pi hardware.
- Understanding of configuration and usage of Apache2 webserver.
- Understanding of PostgreSQL database system and language.

Test Items / Equipment Needed

- The Raspberry Pi server.
- Virtual/Physical input/output connection to the Raspberry Pi.

Estimated test time

It is estimated to take approximately one hour to complete the testing.

Reference Documents

[RD1] *DRINC requirements document.*

[RD2] *Apache documentation. https://httpd.apache.org/docs/*

Definitions

TC	*Test Case*
Rpi	*Raspberry Pi*

Tester: Date:

4 Preparing the Test Environment

Application Setup

- To perform all tests completely, the Raspberry Pi must start in a powered down state.
- All software must be configured prior to the test. The configurations will stay between power cycles.

Equipment Checks

- Does the device power on?
- Can I connect to Apache2 via a web interface from local and remote locations?
- Is the database running and connectable?
- Is the device connected to the network?
- Is there a way to view output on the device?
- Is there a way to input to the device?

Possible checks that have to be done to verify that the Application is functional before the tests can be started.

Test Instructions

If there is any uncertainty on how the interfaces work or interact, reference the requirements document at drinc.org/documentation/requirements.pdf

Comments: _____

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Tester: Date:

5 Test Cases

DRINC Server Testing

Special Instructions

NONE

Test Case ID	TC_FUNCT_03
Description	Tests server functionality
Applicable for	Apache2, PHP, PostgreSQL
Requirements	User has admin access User knows configuration settings for proper access
Initial Conditions	Equipment is setup as per Equipment Setup section.

Step	**Full / Regr**	**Task & Expected Result**	
1		Power down the machine.	
2		Power on the machine	
3		Check remote connectivity to Apache2 via web browser.	**Pass / Fail**
4		Log into device via ssh protocol.	**Pass / Fail**
5	R	Check local connectivity to Apache2 via web browser.	**Pass / Fail**
6	R	Check the output of “ps aux” to check if PostgreSQL is running.	**Pass / Fail**

Comments:

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Tester: Date:

6 Traceability matrix

Requirement id	Test case id	Note
Requirements.pdf	TC_FUNCT_03	