Bynar Test Document

Revision History

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| --- | --- | --- | --- |
| Name | Date | Reason for Change | Version |
| Michelle Zhong | 10/8/2019 | Outline the Test Document | 0.1 |
| Michelle Zhong | 10/9/2019 | Outline Test Cases | 0.2 |
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|  |  |  |  |

Table of Contents

[Revision History 2](#_Toc21505525)

[Setup Information and Prerequisites 5](#_Toc21505526)

[Test Cases 5](#_Toc21505527)

[Test Case 1: Bynar Config 5](#_Toc21505528)

[Description 5](#_Toc21505529)

[Preconditions For Running the Test Case 5](#_Toc21505530)

[Scenario 5](#_Toc21505531)

[Test Case 2: Ceph Backend 5](#_Toc21505532)

[Description 5](#_Toc21505533)

[Preconditions For Running the Test Case 5](#_Toc21505534)

[Scenario 5](#_Toc21505535)

[Test Case 3: Backend Module 5](#_Toc21505536)

[Description 5](#_Toc21505537)

[Preconditions For Running the Test Case 5](#_Toc21505538)

[Scenario 6](#_Toc21505539)

[Test Case 4: Host Information 6](#_Toc21505540)

[Description 6](#_Toc21505541)

[Preconditions For Running the Test Case 6](#_Toc21505542)

[Scenario 6](#_Toc21505543)

[Test Case 5: Helpers Library 6](#_Toc21505544)

[Description 6](#_Toc21505545)

[Preconditions For Running the Test Case 6](#_Toc21505546)

[Scenario 6](#_Toc21505547)

[Test Case 6: Client Interface 6](#_Toc21505548)

[Description 6](#_Toc21505549)

[Preconditions For Running the Test Case 7](#_Toc21505550)

[Scenario 7](#_Toc21505551)

[Test Case 7: Support Ticket Creation 7](#_Toc21505552)

[Description 7](#_Toc21505553)

[Preconditions For Running the Test Case 7](#_Toc21505554)

[Scenario 7](#_Toc21505555)

[Test Case 8: Disk Manager 7](#_Toc21505556)

[Description 7](#_Toc21505557)

[Preconditions For Running the Test Case 7](#_Toc21505558)

[Scenario 7](#_Toc21505559)

[Test Case 9: Database Logs 8](#_Toc21505560)

[Description 8](#_Toc21505561)

[Preconditions For Running the Test Case 8](#_Toc21505562)

[Scenario 8](#_Toc21505563)

[Test Case 10: State Machine 8](#_Toc21505564)

[Description 8](#_Toc21505565)

[Preconditions For Running the Test Case 8](#_Toc21505566)

[Scenario 8](#_Toc21505567)

[Test Case 11: Hardware Health Test 8](#_Toc21505568)

[Description 8](#_Toc21505569)

[Preconditions For Running the Test Case 8](#_Toc21505570)

[Scenario 8](#_Toc21505571)

[Test Case 12: Bynar 9](#_Toc21505572)

[Description 9](#_Toc21505573)

[Preconditions For Running the Test Case 9](#_Toc21505574)

[Scenario 9](#_Toc21505575)

Setup Information and Prerequisites

Travis runs continuous integration on Pull Requests.

# Test Cases

## Test Case 1: Bynar Config

### Description

This case consists of the steps required to test Bynar's Config File

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 2: Ceph Backend

### Description

This case consists of the steps required to test Bynar’s Ceph Backend

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 3: Backend Module

### Description

This case consists of the steps required to test Bynar’s Backend Module

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 4: Host Information

### Description

This case consists of the steps required to test Bynar’s Host Information Module

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 5: Helpers Library

### Description

This case consists of the steps required to test Bynar’s Helper Library

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 6: Client Interface

### Description

This case consists of the steps required to test Bynar’s Client Interface

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 7: Support Ticket Creation

### Description

This case consists of the steps required to test Bynar’s Support Ticket Creation Module

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 8: Disk Manager

### Description

This case consists of the steps required to test Bynar’s Disk Manager

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 9: Database Logs

### Description

This case consists of the steps required to test Bynar’s Database Log In Progress Module

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 10: State Machine

### Description

This case consists of the steps required to test Bynar’s Disk Test State Machine

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 11: Hardware Health Test

### Description

This case consists of the steps required to test Bynar’s Hardware Health Test Module

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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## Test Case 12: Bynar

### Description

This case consists of the steps required to test Bynar’s main program

### Preconditions For Running the Test Case

Root permissions are necessary when running these test cases as the test functions will attempt to create loopback devices, mount them, check their filesystems, etc. The nightly compiler for Rust is also currently required for testing as Mocktopus currently uses features that are not yet in stable Rust.

### Scenario

#### Test Case

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| --- | --- | --- | --- | --- |
| ID | Description | Execution Steps | Expected Result | Actual Result |
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