

**rAppla**  
**Master Test Plan**  
**Version 1.0**

## Revision History

Date	Version	Description	Author
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# Master Test Plan

## Introduction

### Purpose

The purpose of the Master Test Plan is to gather all of the information necessary to plan and control the test effort for a given iteration. It describes the approach to testing the software, and is the top-level plan generated and used by managers to direct the test effort.

This *Test Plan* for the rAppla App supports the following objectives:

- Identifies the required resources
- Outlines the testing approach that will be used
- Identifies the items that should be targeted by the tests

### Scope

- User-Interface Test
- State-Based Test (synchronisation)

### Intended Audience

- Project Members
- People interested in Android-Testing

## Evaluation Mission and Test Motivation

### Background

- Ensure a flawlessly working User-Interface
- Ensure a flawlessly working Update Process

### Cucumber

Alle erfolgreichen Cucumber Tests sind in den Use-Case Spezifikationen aufgelistet

### Evaluation Mission

- Verify specifications
- Finding as many bugs as possible
- Advise about testing

### Test Motivators

- Existing Use Cases
- Performance
- Workflow

### Target Test Items

The listing below identifies those test items□software, hardware, and supporting product elements that have been identified as targets for testing. This list represents what items will be tested.

- Client operations
- Rappla synchronization

## Test Approach

### Testing Techniques and Types

#### *Function Testing*

Technique Objective:	<ul style="list-style-type: none"> <li>• Ensure successful Rapla update</li> <li>• Ensure successful Parsing</li> <li>• Ensure correct Initialisation</li> </ul>
Technique:	Based on Android-Unit-Tests
Oracles:	Result of the Android-Unit-Test and the corresponding test log.
Required Tools:	Android-Unit-Tetsing integrated in Eclipse IDE
Success Criteria:	All test return the correct and expected result
Special Considerations:	The Android-Unit-Test does not create a visible version of the graphical user interface

#### *User Interface Testing*

Technique Objective:	<ul style="list-style-type: none"> <li>• Ensure correct displaying of events and graphical objects</li> </ul>
Technique:	Based on Android-Unit-Testing
Oracles:	Result of the Android-Unit-Test and the corresponding test log.
Required Tools:	Android-Unit-Tetsing integrated in Eclipse IDE
Success Criteria:	All test return the correct and expected result
Special Considerations:	The Android-Unit-Test does not create a visible version of the graphical user interface

# Entry and Exit Criteria

## Test Plan

### Test Plan Entry Criteria

An android emulator or device is connected to the testing computer

### Test Plan Exit Criteria

The test is terminated, when the tests are finished or the device is disconnected

## Deliverables

### Test Evaluation Summaries

Results are output in testlogs

### Reporting on Test Coverage

Results are output in testlogs

## Proof of successful test and integration of Unit-Testing in Eclipse

The screenshot displays the Eclipse IDE interface during a unit test execution. The top toolbar shows the 'Run' button (a green play icon) is active. The 'JUnit' tab in the Package Explorer shows a successful test run for 'basicTests.java' with 5/5 runs, 0 errors, and 0 failures. The test results are listed in the JUnit view:

- samsung-galaxy\_nexus-0149B3A014009011 [Runner: JUnit 3] (0.1 s)
- app.rappla.test.basicTests (0.846 s)
- testActionBarAvailable (0.164 s)
- testCalendarAvailable (0.126 s)
- testRappaDownloadTask (0.101 s)
- testTabsAreCreated (0.126 s)
- testTrue (0.329 s)

The main editor shows the source code of 'basicTests.java' with the following test method:

```
public void testTabsAreCreated() {
    RapplaFragment fragment = (RapplaFragment) activity.getFragment(0);
    assertEquals("Woche", fragment.getTitle());
    fragment = (RapplaFragment) activity.getFragment(1);
    assertEquals("Tag", fragment.getTitle());
    fragment = (RapplaFragment) activity.getFragment(2);
    assertEquals("Bahn", fragment.getTitle());
}
```

The LogCat view at the bottom shows the following messages:

TID	Application	Tag	Text
6560	app.rappla	dalvikvm	GC_EXPLICIT freed 336K, 5% free 21ms
6560	app.rappla	dalvikvm	GC_EXPLICIT freed 30K, 5% free 91ms
6560	app.rappla	TestRunner	finished: testTrue(app.rappla.test)
6560	app.rappla	TestRunner	passed: testTrue(app.rappla.test)
6565	app.rappla	dalvikvm	GC_FOR_ALLOC freed 230K, 4% free 9ms

The status bar at the bottom indicates the file is 'Writable', 'Smart Insert' is enabled, and the cursor is at line 54, column 9. The memory usage is 113M of 359M, and the Android SDK Content Loader is running.