

HomeWidgets Test Class Documentation

1. Purpose of the Class

The HomeWidgets class is a TestNG-based automation suite (extends AMTestBase) designed to validate different homepage widgets. Each widget (Product Support, Announcements, Market Barometer, Database Updates, etc.) is represented as a constant, and test methods ensure the API responses are correct and consistent.

2. Widget Identifiers

The class defines many static widget constants (Markets=12, MarketBarometer_Direct=13, DatabaseUpdates_Direct=16, Alerts_Direct=17, ProductSupport=18, AnalystReports=10, ImportSummary=60, Tasks=53, RecentClientsAndProspects=5, etc.). These constants are used to build API requests and assertions.

3. APIs Under Test

The tests interact mainly with: - home.widgetInfo → fetches widget-specific data - home.homePage → retrieves overall homepage widgets and their state - Custom endpoints via Api.of(id: "...") Test flow: build request → call API → extract response → parse JSON/XML → assert results.

4. Major Test Methods

Examples: - testProductSupport → verifies Product Support widget API - clearHomeWidget / getDefaultWidgets → ensures widgets reset & defaults enabled - enableWidgets / validateWidgets → enables and validates widgets - testQuickstart, testAlerts, testAnalystReports, testImportSummary, testPracticeSummary - testRecentClientsAndProspects, testSecurityAnalysis, testMarketBarometerWidget_Direct/Office - testDatabaseUpdate_Direct/Office, multiple testAnnouncement methods, testMorningstarMarketUpdate, testMorningstarResearch

5. Test Scenarios

Positive cases: API returns 200, default widgets enabled, non-empty JSON/XML, expected tags present. Negative cases: invalid XML handled by substring, unknown product → RuntimeException, disabled widgets tested gracefully. Reconfiguration: widgets can be cleared, enabled, validated for different states.

6. Tools & Frameworks

TestNG for grouping and execution, RestAssured for API testing, JSON/XML parsing via JSONObject and XmlPath, TemplateUtil for request bodies, assertions with Assert class.

7. High-Level Summary

The HomeWidgets test suite validates end-to-end functionality of homepage widgets: - API availability - Data structure correctness - Content validation - State management (clear/enable/defaults) It ensures happy paths and edge cases are covered, increasing confidence

in homepage widget functionality.

8. Test Method Summary (Table)

Method	Widget	Purpose	Assertion
testProductSupport	ProductSupport	Check product support widget availability	Response
getDefaultWidgets	Multiple	Ensure defaults enabled	Status
testAnalystReports	AnalystReports	Validate Analyst Reports	Content
testSecurityAnalysis	SecurityAnalysis	Check Security Analysis	Report
testMarketBarometerWidget_Direct	MarketBarometer_Direct	Validate Market Barometer (Direct)	Not null