

OpenSphere Release 2.4 Feature List

Ease of use	<ul style="list-style-type: none">✓ Simple and straight forward program installation procedure✓ No server component required✓ Comprehensive documentation✓ Intuitive and well organized GUI✓ Variety of message editors and custom editors✓ Work based on Projects stored as XML documents✓ Parallel execution of components✓ Execution monitors
Enterprise Features	<ul style="list-style-type: none">✓ Supports various protocols – JMS, EMS, RV, HTTP, SOAP, JDBC✓ Supports various schemas - WSDL, XSD, DTD✓ Able to interact with databases✓ Integration with ANT build scripts for batch processing
Team Development	<ul style="list-style-type: none">✓ OpenSphere Projects can be stored at centralized location✓ Export/Import single components from OpenSphere projects✓ Substitution variables (fix, sequence, UUID, custom etc.)

Messaging	<ul style="list-style-type: none">✓ Supports Tibco Rendezvous and JMS (ActiveMQ, Tibco EMS, IBM MQ, SwiftMQ etc.)✓ Message capturing, reporting, publishing, request/reply and comparison for JMS, web service (SOAP over HTTP/JMS) and Tibco Rendezvous✓ Messaging modules display inbound and outbound messages as easy editable structured objects✓ Message detectors for Rendezvous and JMS with storable listener definition list✓ Message filtering✓ Message swapping (out-streaming) to file system✓ Chronological message timeline charts✓ JMS message selectors✓ Messages editing using intuitive GUI✓ Message editors have inbuilt message field editors for text, XML, maps, HEX, date/time and even complex object form editor✓ Messages can be captured, stored as XML data and replayed at any time✓ Extract message content using XPath✓ Schema-aware message editors for XML (DTD and XSD) and AE✓ Displays messages and their XML contents using easy readable trees✓ Quickly create sample messages✓ Sample messages are easily managed✓ Compares expected messages with actual messages
Web Services	<ul style="list-style-type: none">✓ Web service clients using SOAP over HTTP and SOAP over JMS✓ SSL client certificate to run the web service over a secure sockets layer✓ Web service server simulator (SOAP over HTTP)✓ Schema-aware message editors for SOAP (WSDL)
Database Support	<ul style="list-style-type: none">✓ Connects to any database using JDBC✓ Executes your SQL commands✓ Load row sets from database and from CSV files✓ Row set editor✓ Save row sets as XML file✓ Row sets can be used as message triggers together with variable substitution
Stubs	<ul style="list-style-type: none">✓ Simulating software components✓ Complex stubs can be created interacting with files, messaging or databases to perform realistic functions

Testing	<ul style="list-style-type: none">✓ Hierarchically structures test suites, test cases and test steps✓ On the fly generation of static test data out of database content✓ Ability to enable/disable single test-suites and/or test-cases of a project✓ Graphical definition of test flow logic and dependencies✓ Uses received values in subsequent test steps✓ Compares data retrieved from messages, databases, XML files, CSV files and text files✓ Produce detailed test result reports including actual and expected data✓ Automatic reporting (publishing) of test results✓ Possibility to execute scripts and OS commands in the test step✓ Running tests in batch mode through Apache Ant
Volume Testing	<ul style="list-style-type: none">✓ Create a volume of messages that are unique (without limit)✓ Create a volume of messages by iterating the same messages✓ Automatic massive testing✓ Can use Excel, XML files and Databases as data source✓ Can map or override individual data elements on the fly while creating volumes of data (ensure uniqueness)✓ Message publishers and web service clients let you define driving row sets through result set editor
Automated Testing	<ul style="list-style-type: none">✓ Regression testing✓ Combining messages together in a sequence✓ Messages sequences can have logic to control flow based on results or data✓ Different data values can be automatically introduced✓ Command-line and ANT operation for batch-mode testing✓ Ability to automate comparison of received messages with expected results (in particular with big messages)
Result Comparison	<ul style="list-style-type: none">✓ Graphical comparison rule editor✓ Comparing non structured text files, XML files and CSV files✓ Comparing of XML structures applying user configured comparison rules✓ Rules can be applied on whole XML document or on selected elements✓ Can ignore certain fields, or portions of the message tree✓ Uses functions to compare messages and XML file content✓ Comparison rules can be created through simple click on tree nodes, complex rules can be defined using XPath expressions✓ Comparison rules can be defined for nested XML content

Tibco specific features	<ul style="list-style-type: none">✓ Supports Tibco Rendezvous (RV)✓ RV reliable and certified✓ export Rendezvous components as Tibco rvscript✓ Supports Tibco Enterprise Message Service (EMS)✓ Tibco EMS™ Monitor
Customizing	<ul style="list-style-type: none">✓ Lets you write custom editors for chosen Rendezvous fields✓ Lets you define encoders/decoders for Rendezvous custom data types✓ Lets your write your own substitution variable providers
