



JSLEE – SIP Servlet Technology Comparison

Phelim O'Doherty
Sun Microsystems



JSLEE and SIP Servlet are two **container based specifications defined through the Java Community Process.**

Presentation Outline

- Technology Background
- Technology Comparison
- Conclusion

Technology Background

- JSLEE

- JSLEE was designed to fill the need in the industry for a high performing event driven application server.
 - Integrates event routing into the component model.
- The technology was required to be generic and satisfy service mediation.
 - Encompasses management capabilities and integration issues.
- Built upon EJB concepts for common programmatic feel.
- Bridges the gap between communications and enterprise systems.

Technology Background

– SIP Servlet

- SIP Servlet was designed to simplify SIP development and attract developers to the SIP protocol.
 - Builds container functionality on top of SIP stack for programming convenience.
- The technology was required to be SIP specific, yet embrace HTTP Servlet.
 - SIP is only protocol required within container
- Built upon Servlet concepts for common programmatic feel.
- Bridges the gap between communications and enterprise systems.

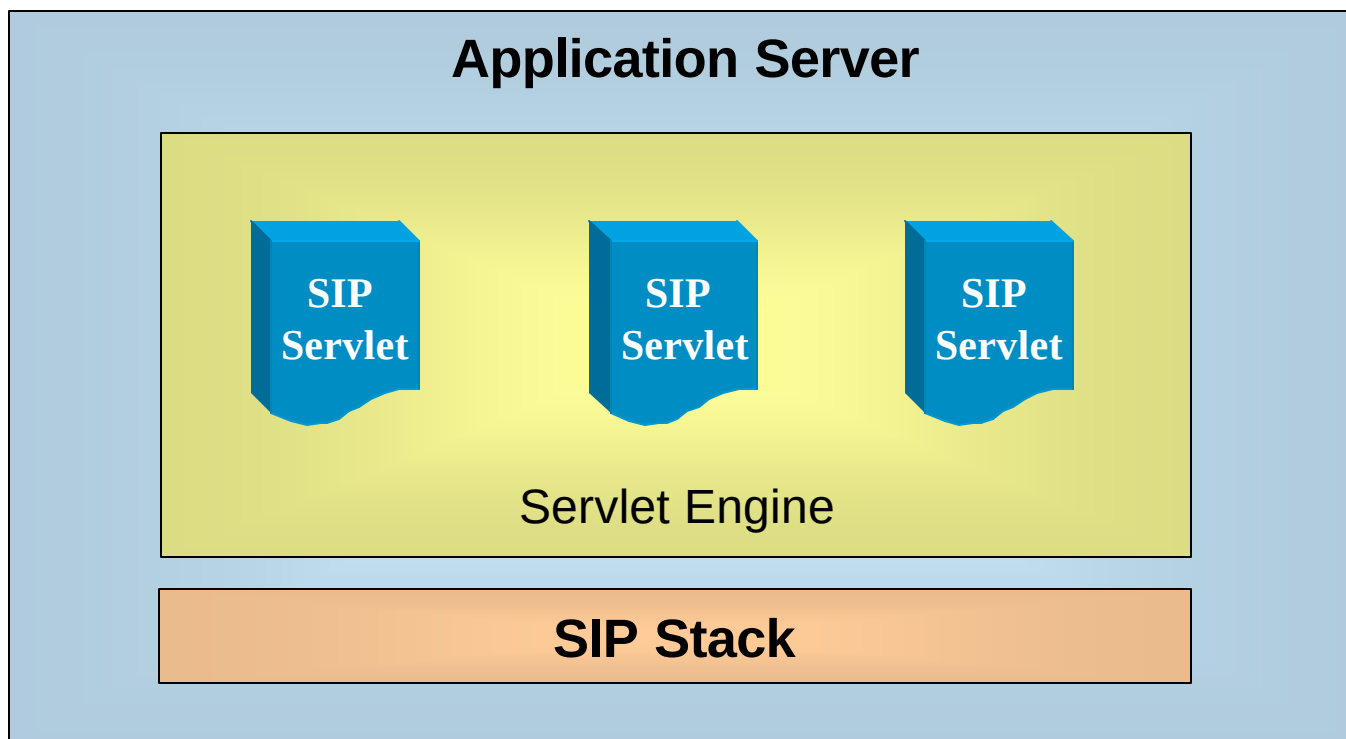
Presentation Outline

- Technology Background
- Technology Comparison
- Conclusion

Technology Comparison

- SIP Servlet is comparable to the 'request/response' model known from HTTP Servlet.
 - Simple programming model
- SIP Servlet integrates a SIP stack into the container to talk to the SIP network.
 - May be viewed as a library built upon a SIP stack hiding complexity from the application developer.
- Base component is SIP Servlet
 - Service logic is coded in the SIP Servlet.
- SIP Servlet offers different handlers to process SIP Requests.
 - Response to the request will be handled within that method.
- Suitable for non-transaction based services and rapid prototyping

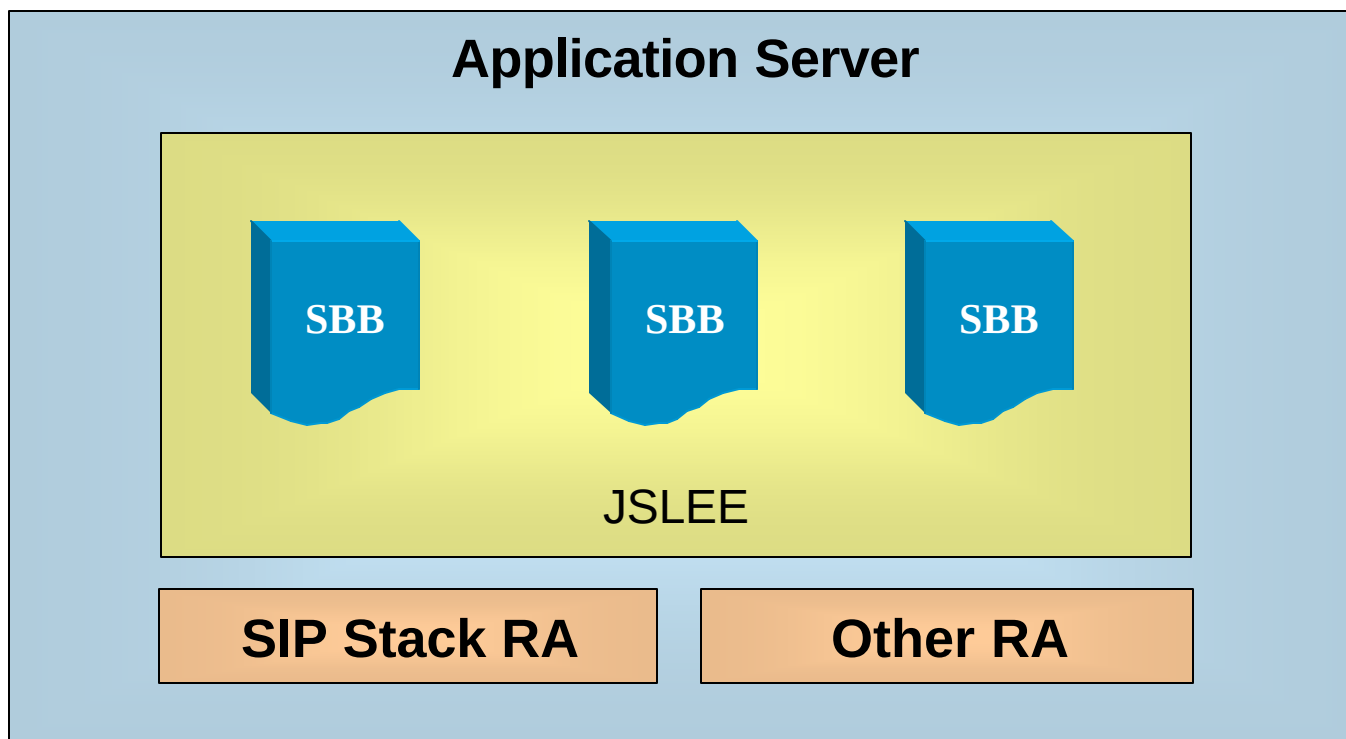
Technology Comparison



Technology Comparison

- JSLEE is based on EJB concepts, stripping away functions not required in a primary event driven approach.
 - JSLEE is the logical step from SIP Servlet, as J2EE was from Servlet.
- JSLEE is component based, modularized, and based on transactions.
 - Base component is Service Building Block (SBB).
 - Servlet logic is coded in the SBB.
 - Supports composition at the component level
- Easily integrates with J2EE, using well defined Java Connector Architecture.
- JSLEE is a horizontal and integrative execution environment
 - Support legacy and new protocols.
- JSLEE connects to the network layer via resource adaptors, any network supported.

Technology Comparison



RA = Resource Adaptor

Presentation Outline

- Technology Background
- Technology Comparison
- Conclusion

Conclusion

- JSLEE abstracts from the network layer, SIP Servlet does not.
- SIP Servlet programming model is simpler, compared to JSLEE for SIP services.
- JSLEE programming model supports ACID properties of transactions, SIP Servlet does not.
- SIP Servlet is a light weight specification, compared to JSLEE.
- JSLEE defines alarms, timer, statistics, trace facilities, SIP Servlet defines timer facility only.
- JSLEE defines dynamic management of services and profiles, SIP Servlet does not.
- JSLEE defines profile capabilities, SIP Servlet does not.
- JSLEE is more complex, yet more powerful than SIP Servlet as an execution environment



phelim.odoherty@sun.com

