



PyGridWare Overview

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Python WS Core

- Implementations of the Web Services Resource Framework (WSRF) and Web Service Notification (WSN) family of specifications
 - Based on June 2004 OASIS schemas with minor changes
 - Using 2004/03 version of WS-Addressing specification.
 - WS-BrokeredNotification not supported
- Compatible with the GT4 Java WS Core

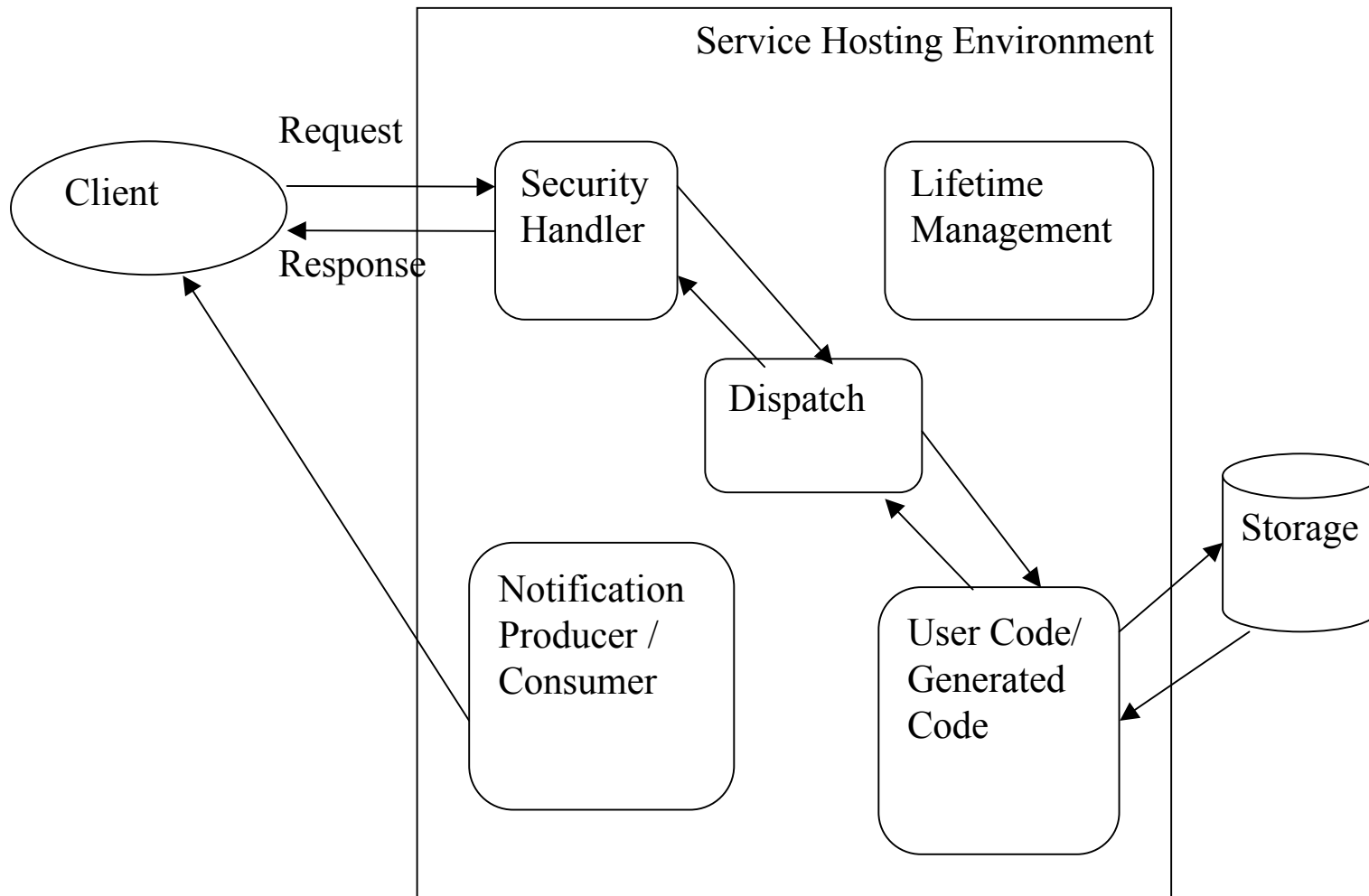
A Closer Look

- Provides API and tools for building WS-Resources (Web services that operate on stateful resources)
- Provides Python binding generation from WSDL
 - Focus on WS-I BP-1.0 compliance
- Security
 - Transport layer (https)
 - Secure Conversation
 - Secure Messaging

A Closer Look (cont.)

- Implemented using standard Python software
 - ZSI for SOAP handling
 - Much of our work has been contributed back to ZSI
 - 4Suite and PyXML for XML
 - Twisted for the hosting environment and event loop

PyGridWare Architecture



pyGridWare Features

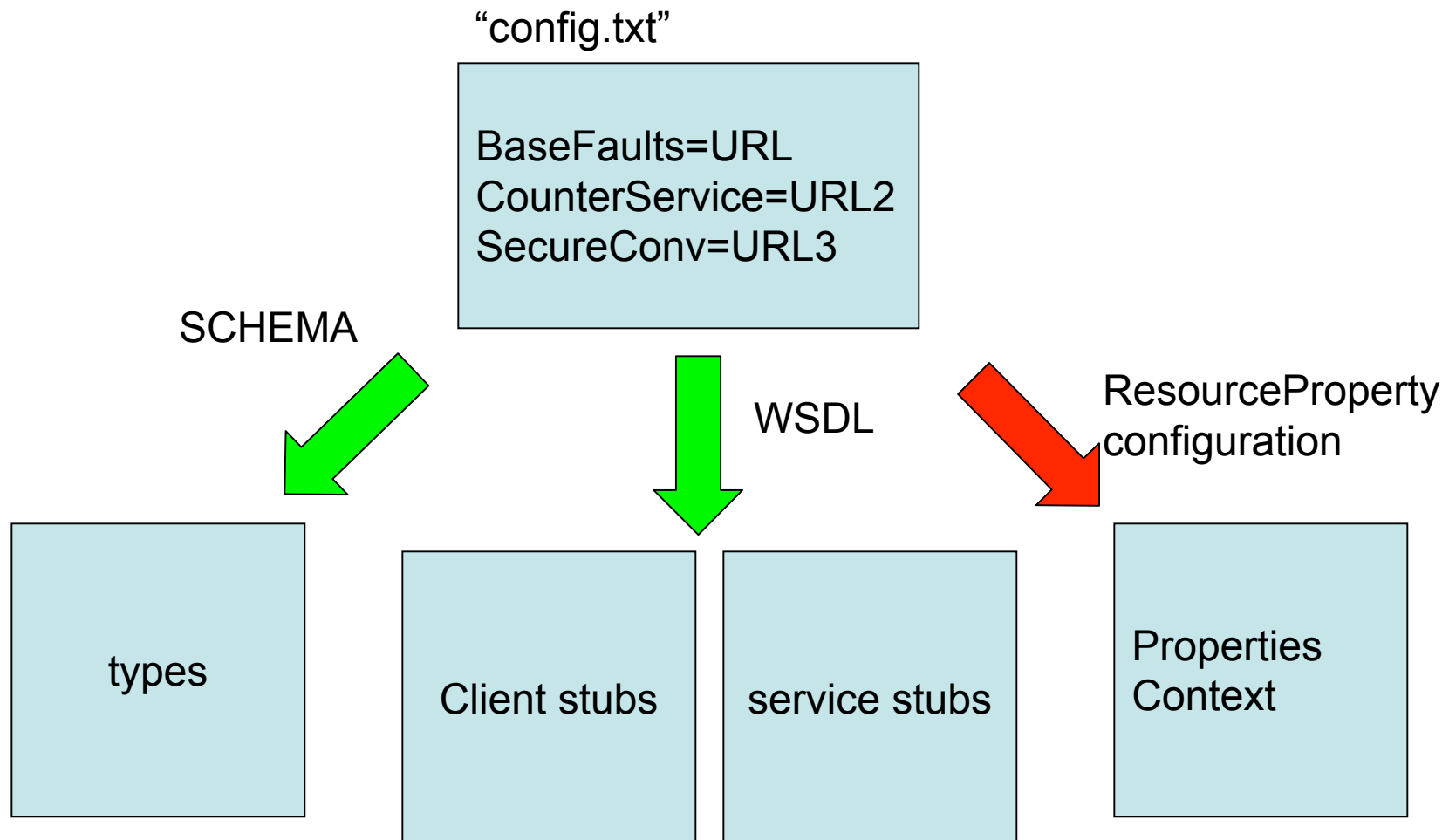
- A lightweight standalone container
- Automatic service startup on container start
- Basic API for resource persistence and recovery
- Notification infrastructure:
 - Subscription Manager/Notification Producer
 - Lightweight Notification Consumer

pyGridWare Features

- Security infrastructure:
 - Pluggable handlers for WS-Security
 - Secure Conversation Service
 - Implementing a compatible Delegation Service
- Support for wrapping legacy codes and command line applications as Grid Services

Python Binding Generation

```
%python setup.py --regenerate build
```



More Information

- Project site
 - <http://dsd.lbl.gov/gtg/projects/pyGridWare/>
- ZSI
 - <http://pywebsvcs.sourceforge.net/zsi.html>
- Twisted
 - <http://twistedmatrix.com/products/twisted>
- 4Suite
 - <http://4suite.org/index.xhtml>