

Struts: A Quick Installation Guide

The title is centered and overlaid on a grid of six orange circles. The top row consists of three circles: the first is a hollow outline, the second and third are solid. The bottom row also consists of three circles: the first and second are solid, and the third is a hollow outline.

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Struts: A Quick Installation Guide

- Locating Struts
- Struts Dependencies
- Installing Struts
- Advanced Installation

Locating Struts



Struts Project Pages

- Main page -
<http://struts.apache.org>
- Download page -
<http://struts.apache.org/download.cgi>
 - Full distribution - source, binaries, docs, examples
 - Library - binaries to be included in Web app
 - Examples - pre-canned starting points, binaries bundled with each example
 - Source - requires manually build
 - Documentation - just the docs
- Documentation page -
<http://struts.apache.org/1.3.5/index.html>

“Installing” Struts

- No real installation process
 - Installation depends on download
 - Library download is collection of 24 libraries
 - Examples download is collection of web apps that can be deployed
- Installation is really including struts framework within Java EE compliant web application archive (WAR)
 - Place required libraries in `WEB-INF/lib`
 - Place configuration files in `WEB-INF/`
- Two starting points for creating a struts application
 - Create WAR from scratch (including libraries and config files; creating config files from scratch)
 - Use `struts-blank-1.3.5.war` (empty struts configured web application)

Struts Application From Scratch

- Required configuration files (in WEB-INF):
 - web.xml - standard web.xml modified to include struts
 - struts-config.xml - standard struts configuration file
 - validation.xml - standard struts validation file
- Required libraries (in WEB-INF/lib)

GroupId	ArtifactId	Version	Classifier	Type	Optional
antlr	antlr	2.7.2	-	jar	
commons-beanutils	commons-beanutils	1.7.0	-	jar	
commons-chain	commons-chain	1.1	-	jar	
commons-digester	commons-digester	1.6	-	jar	
commons-validator	commons-validator	1.3.0	-	jar	
oro	oro	2.0.8	-	jar	
commons-fileupload	commons-fileupload	1.1.1	-	jar	(optional)
junit	junit	3.8.1	-	jar	(optional)

- Deploy WAR artifact to webapps directory of container

Struts Application From struts-blank

- Struts-blank has standard WAR layout
 - WEB-INF contains all configuration files
 - WEB-INF/lib contains all struts core libraries
 - Not configured to support tiles
- Web resources are located in pages
- Java resources (including property files) are located in WEB-INF/src/java
- Add files to pages directory and modify config files as necessary
- Deploy WAR artifacts to webapps directory of container

Advanced Installation



- Typically a one-to-one installation between struts and web application
 - Each WAR has its own struts libraries in WEB-INF/lib
 - Each WAR has its own struts config files in WEB-INF
- Can simplify installation of struts libraries
 - Place them in shared “directory” for web container
 - Could be literally a shared location (like tomcat) or could be part of container’s classpath
- Beware of security implications that might arise
- Beware of runtime versioning implications that might arise



About DevelopIntelligence

- Founded in 2003
- Provide outsourced services to learning organizations in area of software development
- Represents over 35 years of combined experience enabling software development community through educational and performance services
- Represents over 50 years of combined software development experience
- Delivered training to over 25,000 developers worldwide

Areas of Expertise

● Instruction

- Java
- J2EE
- WebServices / SOA
- Web Application Development
- Database Development
- Open Source Frameworks
- Application Servers

● Courseware

- Java Application Development
- Java Web App Development
- Enterprise Java Development
- OOAD / UML
- IT Managerial
- Emerging Technologies and Frameworks



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