

APACHE MAVEN





INTRODUCTION



- Maven is a software management and comprehension tool based on the concept of POM (Project Object Model).
- POM is a fundamental unit of work that contains information about project and configuration details used by maven to build the project.
- Maven 3.5.0 is the latest release and recommended version for all users.



MAVEN FEATURES

- Maven is more than just Build Tool.
- Maven provides:
 - Easy Build Process
 - Consistent Project structure
 - Uniform Build System
 - Quality Project Information
 - Guideline for Best Practices Development
- It also provides visibility, reusability, Maintainability.



Comparison with ANT

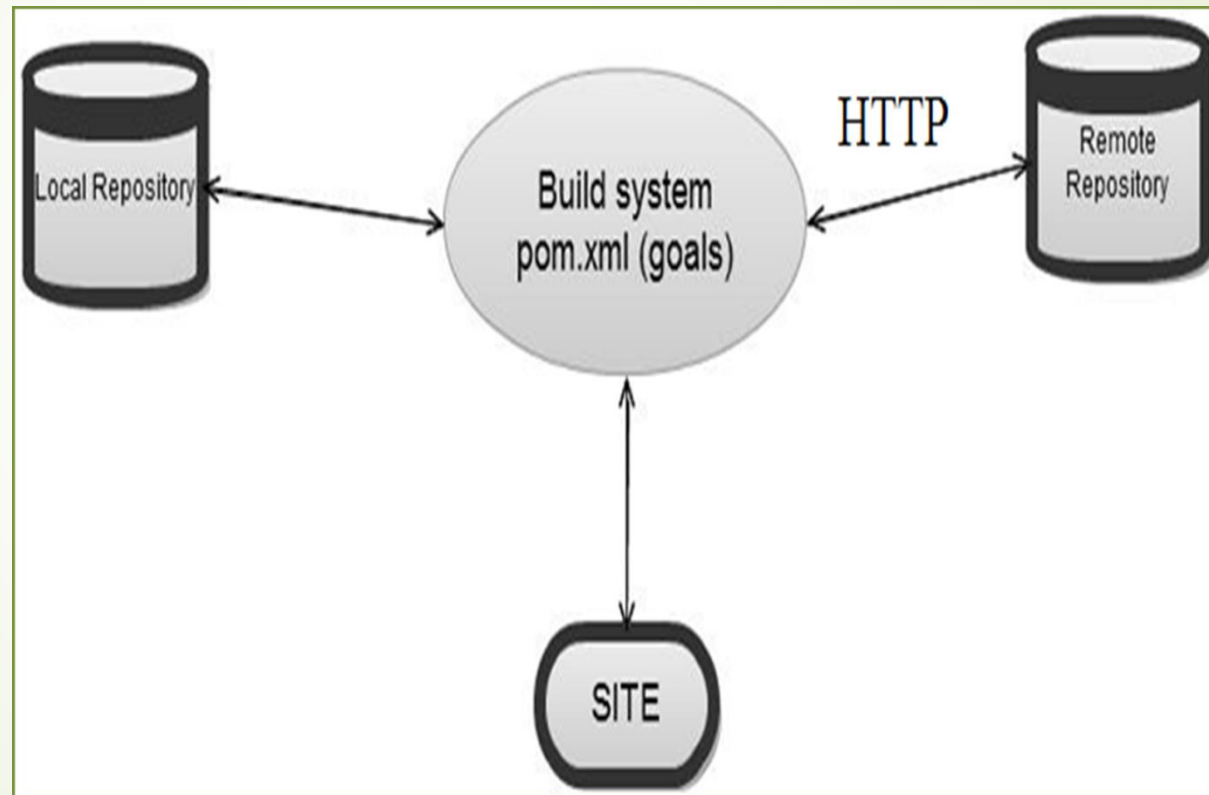
- One level above ANT
- Faster turn around time to set up a powerful build
- Less maintenance
- Repository Management
- Automatic Downloads



The Maven Mindset

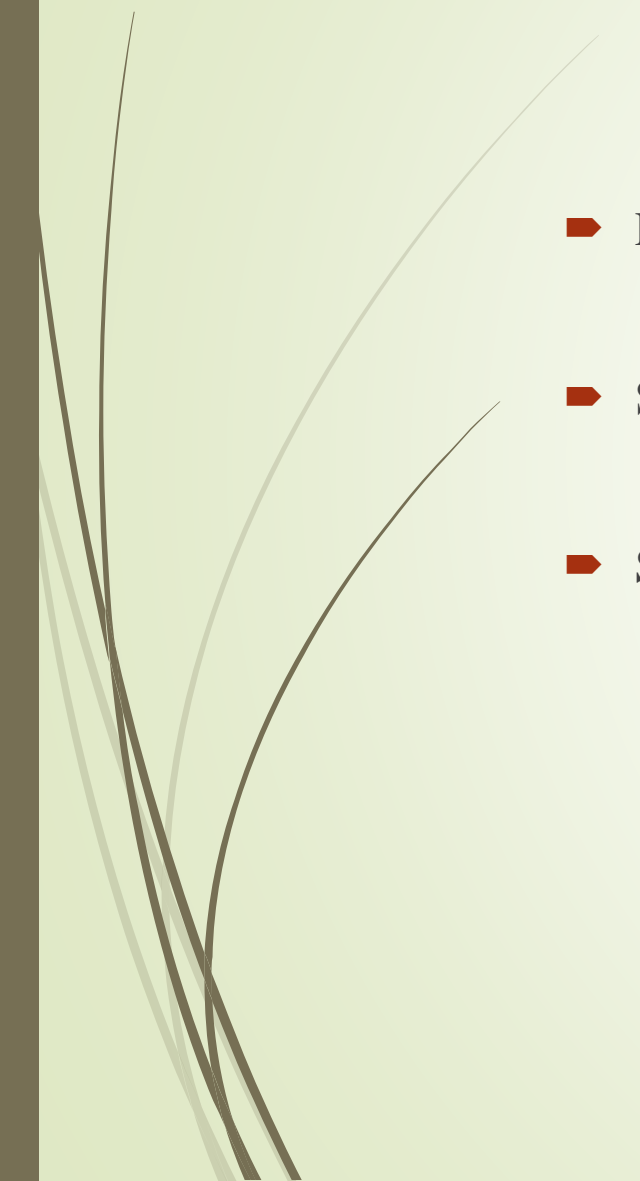
- All build systems are essentially the same:
 - Compile Source Code
 - Copy Resource
 - Compile and Run Tests
 - Package Project
 - Deploy Project
 - Clean up
- Maven is clearly a Build tool, Dependency Management tool and Documentation tool.

Overview of Simple Architecture





Contents of the Created Project

- POM
 - Source tree for your application's sources
 - Source tree for your test sources
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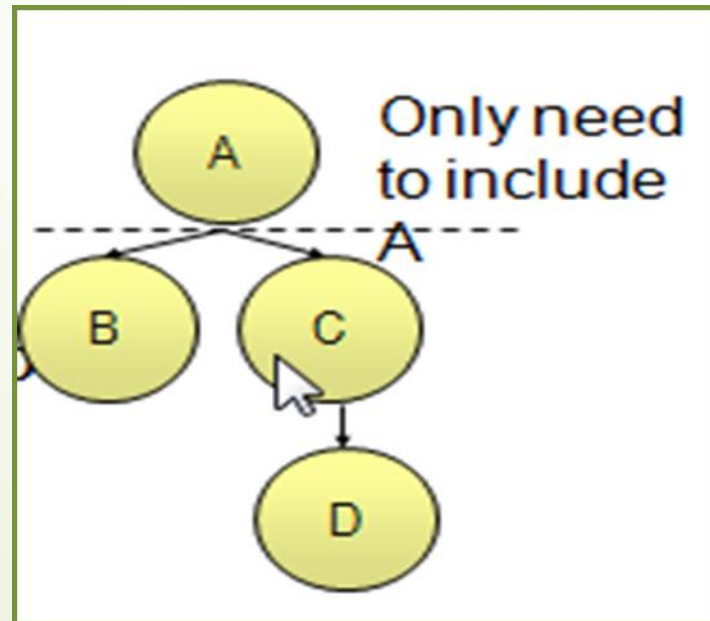


Project Object Model (POM)

- POM is an XML file containing information about project and configuration details.
- Dependencies (Transitive Dependencies), Inheritance and Aggregation
- Key Elements
 - Project
 - Model version
 - Group ID
 - Packaging
 - Version
 - Name
 - URL
 - Description

Transitive Dependency

- Allows automatic inclusion of libraries
- Avoids the need to discover and specify the required libraries on your own





Repository Management

- Target – copies all the code and XML files into this and build this directory
- It will have a local repository for the local machine and that acts as a proxy
- It will sync up with the actual public repository everytime.



THANK YOU