Name	Type	Involved Concepts	Description	Count
Configuration Artifact	external	Docker, Maven, JSON, Poetry, TSconfig	When Docker is used for deployment, often configuration files, such as the pom.xml and package.json, are copied from the local root directory to the host machine's file system to build and run the application in a Docker container. This means there is a configuration dependency between Docker's COPY/ADD command and the name of configuration artifact to be copied.	94
Executable Name	external	Spring, Maven, Docker	Maven and Docker depend on the executable name, which is specified in the pom.xml and in the Dockerfile. Specifically, Maven creates the executable name using the the artifactID, version, and a packaging format, which defaults to JAR if not specified. Within the Dockerfile, the executable name is either used by the first argument of Dockers ADD or COPY command to add the executable to the file system of the container. Note that the executable name is usally part of a file path, since Maven stores the executable name in the target directory.	68
Port	external	Docker, Docker-Compose, Spring Boot	Dockerized Spring Boot applications usually exhibit multiple configuration options, which specify the applications reachable port. Due to the nature of Docker containers, all ports that are available from outside the container have to be explicitly exposed. In this case, Docker Compose bundles different containers together in a new one, which means the port has to be exposed again. That is, the port is defined at different places, such as in the Dockerfile, docker-compose.yml, and application.yml.	58
Database Credentials	external	Docker-Compose, Spring Boot	Multi-container applications often incorporate databases, such as a MySQL or PosgresSQL. To access those databases, credentials are specified at different configuration artifacts, such as in Spring Boot's property file and in the docker-compose.yml.	62
Node.js Version	external	Travis, Cypress, Node.js, Docker-Compose, Maven	The integration of Node.js with build tools and CI/CD pipelines, such as Maven and Travis-CI, often creates an external configuration dependency based on the Node.js version. For example, the Node.js version is specified in the POM or Travis file to determine which single version of Node.js should be used to run tests. Therefore, the Node version is encoded in various configuration artifacts.	33
Artifact/Module Name	external	Maven	Multi-module Maven projects are created from an aggregator POM that manages a group of submodules that have their own POM file. The parent POM specifies the submodules in the Modules section using the artifact ID of the submodules. This creates an external configuration dependency across multiple POM files.	17
Cypress BaseURL Docker-Compose	external	Cypress, Docker-Compose	Using Cypress and Docker-Compose to run end-to-end tests requires that the default settings for Cypress be included in the Docker-Compose configuration file. Here, the base URL of the web application under test is specified in cypress.json and in the Docker Compose configuration file, creating an external configuration dependency between these technologies.	11
Internal Docker Dependency	internal	Docker	Within Docker there is often an internal dependency between Docker's ADD/COPY and ENTRYPOINT/CMD commands, e.g., when both commands specify the executable name inside the container. Specifically, the internal Docker dependency exists between the second argument of Docker's ADD/COPY command and one part of the ENTRYPOINT/CMD command.	63
Internal Docker-Compose Network	internal	Docker-Compose	In order for a service to be reachable by other services, Docker-Dompose sets up a single network by default. When custom networks are set up, each service must specify the custom network so that the services can reach each other, which creates an internal dependency within the Docker-Compose configuration file.	25
Internal Java Version	internal	Maven	To compile a Java project with a specific version, the -source and -target options can be set. These options often have the same value, creating an internal configuration dependency within Maven.	9