# Paper review of the entitled research paper « Service Coroner : A Diagnostic Tool for Locating OSGi Stale References »

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# 1   SUMMARY :

Nowadays, the use of OSGi platform is adopted increasingly in software industry, such as the Eclipse project, desktop applications and server middlewares, because of its beneficial pluggable architecture. Moreover, it supplies a framework for the dynamic deployment of java-based applications allowing to install, to activate, to update and to uninstall application modules without the need to restart the host Java Virtual Machine.

Such dynamicity, nevertheless, may cause a problem described in the OSGi specification as Stale References. In fact, this issue is provoked when services from uninstalled modules are still referenced by active code. Notably, when developers using OSGi Framework, provide code that retain service references even though, when the providing bundles (modules) become unavailable.

Actually, identifying stale references is not a simple task from the moment that there are no diagnostic tools available to solve this problem. Indeed, this research paper is attempting to overcome this OSGi issue by presenting the ServiceCoroner, which is a diagnostics tool that detects Stale references in running applications. Furthermore, the main goal of the ServiceCoroner is not to handle the stale references problem, but to detect it and helps developers and administrators of OSGi based applications ensure that bundles provide behavior well suited to OSGi dynamics.

# 2   EVALUTION :

# 3   SYNTHESIS :