# Static Analysis

## Server

Tool: gometalinter v1 (gopkg.in\alecthomas\gometalinter)

|  |  |  |
| --- | --- | --- |
| **Warning** | **Count** | **Solution** |
| Function must have comment or be unexported | > 50 | fixed |
| Don’t use dot imports | 46 | 17 fixed  29 suppressed |
| Unused constant (deadcode) | 1 | suppressed |
| Don’t use underscores in names | > 50 | fixed |
| Names like xxxId must be xxxID | > 50 | fixed |
| Names like foo.FooBar must be foo.Bar | 3 | fixed (just renamed) |
| Shadowed variables | 12 | fixed |
| Returned value not checked | 30 | fixed |
| High cyclomatic complexity (> 10) | 7 | 3 fixed  4 suppressed |
| Composite literal uses unkeyed fields | 2 | fixed |
| Ineffective struct alignment | 4 | fixed |
| Useless data type cast | 2 | fixed |
| Don’t use ALL\_CAPS for constants | > 50 | fixed |
| Useless ELSE: If block ends with return statement | 3 | fixed |
| Ineffectual assignment to variable | 8 | fixed |
| “for \_ := range” may be simplified to “for range” | 3 | fixed |
| **TOTAL:** | **> 500** | **suppressed:**   * **deadcode 1,** * **gocyclo 4,** * **dot imports 29** |

## Client

Tool: FindBugs 3.0.1

|  |  |  |
| --- | --- | --- |
| **Warning** | **Count** | **Solution** |
| System.exit(0) | 2 | 1 fixed (removed)  1 suppressed |
| Stream not closed | 2 | fixed |
| Handling Exception instead of RuntimeException | 1 | fixed (additional catch added) |
| Malicious code vulnerability (this.date = date) | 1 | fixed (this.date = new Date(date)) |
| Convert String to Bytearray with default encoding | 9 | fixed (UTF-8 added) |
| Setter is synchronized, but getter not | 1 | fixed |
| Thread started in constructor | 1 | fixed (thread started later) |
| Inconsistent synchronization | 3 | fixed |
| Inner class may be declared Static | 1 | fixed |
| **TOTAL:** | **21** | **fixed: 20**  **suppressed: 1** |