

# Open Source Programming

## Seminar project

Easy to implement bug fixes in project  
Libreoffice

29.05.2014

Mukhiddin Yusupov

# Content

- Goals
- Task definition
- Results
- Personal experiences

# Goals

- Learn and have a feeling of basics skills necessary in OSP
  - communication with developers;
  - working with repository: patch generation, commits of changes, pulling and etc;
  - understanding the code written by others
- Make my own contribution, although very tiny, in transition from old and deprecated logging system to the new one

# Task definition

Rewriting of some source files' portions of codes accordingly so that they use new and more appropriate logging functions written in C++ instead of the old and deprecated ones written in C language.

These are the places in source files where more understandable assertion or debug information has to be written to log file

```
if ( pProfile->m_bIsValid == false )
{
-   OSL_ASSERT(pProfile->m_bIsValid);
+   SAL_WARN_IF(!pProfile->m_bIsValid, "sal.osl", "!pProfile->m_bIsValid");

        if (! addSection(pProfile, i, pStr + 1, pChar - pStr - 1))
        {
-           OSL_ASSERT(false);
+           SAL_WARN("sal.osl", "Adding section => false");
            continue;
        }

if (!S_ISDIR(st.st_mode))
{
    OSL_TRACE("$HOME/.config is not a directory");
    SAL_INFO("sal.osl", "$HOME/.config is not a directory");
    dirOK = false;
}
```

# Results

- Four commits were done
- Two were abandoned, two were accepted and one was merged

## Solutions:

- In old codes OSL\_ASSERT was used both for assertion and for warning messages. This was replaced with C/C++ standard assert if it is assertion and SAL\_WARN/SAL\_WARN\_IF if it is warning messages
- To log information useful for debugging SAL\_INFO/SAL\_INFO\_IF were used

Merged

[Reply...](#)

Included in ▼

Revisions ▼

Download ▼

Commit 4c05911b7ef25505acacbb81053a56cf428e9edc [\(gitweb\)](#)  
 [+] Author [Mukhiddin Yusupov <ymukhiddin@gmail.com>](#) May 21, 2014 1:46 AM  
 Committer [Stephan Bergmann <sbergman@redhat.com>](#) May 22, 2014 8:29 AM

[fdo#43157](#) - Clean up OSL\_ASSERT, DBG\_ASSERT

Replaced OSL\_ASSERT with SAL\_WARN\_IF, OSL\_TRACE with SAL\_INFO

Change-Id: Ia2283c09ac702558fe6ad39e963b0f401ef31de0  
Signed-off-by: Stephan Bergmann <sbergman@redhat.com>

Code-Review +2 [Christian Lohmaier](#)

Verified +1 [Christian Lohmaier](#)

### Files

Diff against:

File Path	Comments	Size
▶ <input type="checkbox"/> Commit Message		
<input type="checkbox"/> sal/osl/w32/thread.c	16	
<input type="checkbox"/> sal/osl/w32/time.c	2	
	+9, -9	

### Files

Diff against:

File Path	Comments	Size
▶ <input type="checkbox"/> Commit Message		
<input type="checkbox"/> sal/osl/unx/profile.cxx	377	
<input type="checkbox"/> sal/osl/unx/security.cxx	19	
	+46, -350	

### History

[Expand All](#)

- Mukhiddin Yusupov Uploaded patch set 1.
- Stephan Bergmann Patch Set 1: Code-Review-1 (1 comment)
- Mukhiddin Yusupov Uploaded patch set 2.
- Stephan Bergmann Uploaded patch set 3.

#### Stephan Bergmann

Change has been successfully pushed.

# Experience

- During the work I communicated several times with the developers and maintainers of the project and found out these facts:
  - Responding very quickly;
  - Always helpful to solve any problem
  - Reviewed, explained the mistakes and guided me to right direction all not more than a day after I made commit
- By reading and learning the project structure obtained valuable programming skills and information related to project design and architecture