

# OSP semestrální práce

Bug 75240 - Improve coding style in  
bitmap3.cxx

# LibreOffice

- Kancelářský balík
- Šířený pod licencí LGPL
- Multiplatformní
- C++, Java, Python

# Bug 75240 - Improve coding style in bitmap3.cxx

- Použití nepřehledného programovacího stylu
- Potřeba refaktoringu

# Explicitní správa paměti

```
BitmapReadAccess* pAcc = AcquireReadAccess();
Bitmap           aOutBmp( Size( nDstW, nDstH ), 24 );
BitmapWriteAccess* pWAcc = aOutBmp.AcquireWriteAccess();
- long*           pMapIX = new long[ nDstW ];
- long*           pMapIY = new long[ nDstH ];
- long*           pMapFX = new long[ nDstW ];
- long*           pMapFY = new long[ nDstH ];
+ boost::scoped_array<long> pMapIX(new long[ nDstW ]);
+ boost::scoped_array<long> pMapIY(new long[ nDstH ]);
+ boost::scoped_array<long> pMapFX(new long[ nDstW ]);
+ boost::scoped_array<long> pMapFY(new long[ nDstH ]);
long             nX, nY, nXDst, nYDst;;
double           fTemp;
long             nTemp , nTempX, nTempY, nTempFX, nTempFY;
```

# Nepřehledné výrazy

- $pMapFX[ nX ] = (long) ( ( fTemp - ( pMapIX[ nX ] = MinMax( (long) fTemp, 0, nTemp ) ) ) * 128. );$
- +  $pMapIX[ nX ] = MinMax( (long) fTemp, 0, nTemp );$
- +  $pMapFX[ nX ] = (long) ( ( fTemp - pMapIX ) * 128. );$

# Využívat proměnné uvnitř bloků

```
- long      nX, nY, nXDst, nYDst;;
- double    fTemp;
- long      nTemp, nTempX, nTempY, nTempFX, nTempFY;
- sal_uint8 cR0, cG0, cB0, cR1, cG1, cB1;
- long      nStartX = 0, nStartY = 0;
- long      nEndX = nDstW - 1L;
- long      nEndY = nDstH - 1L;
- long      nMax = 1 << 7L;
+ sal_uint8 cR0, cG0, cB0, cR1, cG1, cB1;
+ long nStartX = 0, nStartY = 0;
+ long nEndX = nDstW - 1L;
+ long nEndY = nDstH - 1L;
+ long nMax = 1 << 7L;
-----
- for( nX = 0L, nTempX = nW - 1L, nTemp = nW - 2L; nX < nDstW; nX++ )
+ for( long nX = 0L, nTempX = nW - 1L, nTemp = nW - 2L; nX < nDstW; nX++ )
  {
-   fTemp = nX * fRevScaleX;
+   double fTemp = nX * fRevScaleX;
....
  }
```