



IBM ILOG Views V5.3

Release Notes

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About these Release Notes

This section contains the following release notes for IBM® ILOG® Views:

- ◆ *Release Notes for Version 5.3*
- ◆ *Release Notes for Version 5.2*
- ◆ *Release Notes for Version 5.1*
- ◆ *Release Notes for Version 5.0.1*
- ◆ *Corrected Patches Since Version 5.0*
- ◆ *Release Notes for Version 5.0*
- ◆ *Release Notes for Version 4.0.2*

Release Notes for Version 5.3

Note for users of previous releases of ILOG Views

All known incompatibilities of this version of IBM® ILOG® Views with previous versions are described in the file `COMPAT.TXT` that you can find in the installation folder.

This can be useful if you have any problems compiling or running your old applications.

New Ports

With this version, support has been added for the following ports:

- ◆ `ia64_hpux11_6.17`: This port is intended to be used on the Itanium® platform running under HP UX 11.23 or higher. The compiler to be used is a C++ version 6.17 in 64 bits mode.
- ◆ `ia64-32_hpux11_6.17`: This port is intended to be used on the Itanium platform under HP UX 11.23 or higher. The compiler to be used is a C++ 6.17 in 32 bits mode.
- ◆ `x64_solaris10_11`: This port is intended to be used on x86-64 platforms (also called AMD 64) running under Sun™ Solaris™10 or higher. The compiler to be used is Sun Studio 11 in 64 bits mode.

- ◆ `x86_solaris10_11`: This port is intended to be used on x86 platforms running under Sun Solaris 10 or higher. The compiler to be used is Sun Studio 11 in 32 bits mode
- ◆ `power64_aix5.2_7.0`: This port is intended to be used on PowerPC platforms running under AIX 5.2. The compiler to be used is Visual Age 7.0 in 64 bit mode (option `-q64`) using standard C++ streams (`-DIL_STD`)

Note that on these new ports, only IBM® Informix® and Oracle® are supported.

Changes to Product Icons

Most product icons have been changed to comply with the IBM® look-and-feel guidelines.

Removal of Deprecated Package

The Web Deployment package of IBM® ILOG® Views Component Suite is deprecated and has been removed in this release.

Release Notes for Version 5.2

Note for users of previous releases of ILOG Views

All known incompatibilities of this version of ILOG Views with previous versions are described in the file `COMPAT.TXT` that you can find in the same directory as this `README` file.

Please read it if you have any problems compiling or running your old applications.

Technical Support

If you have problems using the ILOG Views libraries and if the documentation set does not help you fix your problem, please send a bug report to the ILOG support team, using the template provided in the file `BUGREPORT`, or `bugreprt.txt` if you are using a Windows platform.

New Features

- ◆ Support of S57 map format
 - ILOG Views Maps now supports the S57 nautical maps format, a standard published by the International Hydrographic Organization (IHO).

- ◆ Support semi-transparent PNGs
 - PNG images containing semi-transparent pixel are now supported.
- ◆ Easier interactions with Spline objects
 - New interactors have been added to permit easier creation and interactions with spline objects.
- ◆ New filter effects to simulate different levels of transparency on graphics objects
- ◆ Ctrl Mouse wheel support for zoom in/out in Studio
- ◆ Mouse wheel support for up/down movement in spinbox
- ◆ Ctrl-Tab key can be used for Tab-pane rotation
- ◆ Generalized use of the ESC key for interrupting object creation interactors
- ◆ GUI restructuring for Studio. New icons and dialog boxes
- ◆ Better support of Windows Vista with Aero L&F
 - Windows Vista has new visual effects and look and feel elements that are now supported with ILOG Views.
- ◆ New samples and documentation for printing
- ◆ Support of Oracle 10 and Oracle 11 in DataAccess
- ◆ Support of DB2 9.5 in Data Access
- ◆ Support of OLE DB in DataAccess
- ◆ Port on VS 2008
- ◆ Integration of all bug fixes since version 5.1
- ◆ Other minor fixes and evolutions

Compilation

ILOG Views is delivered with a set of libraries that are stored in a directory that depends on the type of machine you are using, the operating system it runs on and the compiler you plan to use.

This directory can be one of:

System name	Hardware	Operating System	Compiler
alpha_5.1_6.5	HP/Compaq (DEC) Alpha	Tru64 UNIX (OSF1) V5.1 or higher	C++ 6.5 or higher
hp32_11_3.73	HP 9700	HP-UX 11.11 or higher	HP ANSI C++ A.03.73 or higher using -mt -AA options
hp64_11_3.73	HP 9700	HP-UX 11.11 or higher	HP ANSI C++ A.03.73 or higher in 64bit mode (+DA2.0W) using -mt -AA options
ia64_hpux11_6.17	IA-64	HP-UX 11i v3	HP C++/ANSI A.06.17 in 64 bit mode
x86_RHEL4.0_3.4	x86	RedHat Enterprise Linux 4.0 (linux 2.4, glibc 2.3)	gcc3.4
x86-64_RHEL4.0_3.4	x86-64	RedHat Enterprise Linux 4.0 (linux 2.4, glibc 2.3)	gcc3.4
x86_sles10.0_4.1	x86	SUSE Linux Enterprise Server 10 (linux 2.6, glibc 2.4)	gcc4.1
x64_solaris10_11	x86-64	Solaris 10	Sun C++ 5.8 (aka Sun One Studio 11) in 64 bit mode
x86_solaris10_11	x86	Solaris 10	Sun C++ 5.8 (aka Sun One Studio 11)
x86_.net2003_7.1	x86	Windows Server 2003 / XP / Vista	Microsoft Visual C++ .NET 2003 (7.1)
x86_.net2005_8.0	x86	Windows Server 2003 / XP / Vista	Microsoft Visual C++ .NET 2005 (8.0)
x86_.net2008_9.0	x86	Windows 2000/Server 2003/XP/Vista	Microsoft Visual C++ .NET 2008 (9.0)
x64_.net2008_9.0	x64	Windows (64) Server 2003 / XP / Vista	Microsoft Visual C++ .NET 2008 (9.0 - 64 bits)
rs6000_5.1_6.0	RS6000	AIX 5.1 or higher	Visual Age 6.0 using standard C++ streams (- DIL_STD)

System name	Hardware	Operating System	Compiler
power32_aix5.2_7.0	PowerPC	AIX 5.2 or higher	Visual Age 7.0 using standard C++ streams (-DIL_STD)
ultrasparc32_8_6.2	Sun Ultra Sparc	Solaris 2.8 or higher	Sun C++ 5.3 (Forte 6.2) or higher
ultrasparc64_8_6.2	Sun Ultra Sparc	Solaris 2.8 or higher	Sun C++ 5.3 (Forte 6.2) or higher in 64bit mode (-xtarget=ultra -xarch=v9)
ultrasparc32_10_11	Sun Ultra Sparc	Solaris 10	Sun C++ 5.8 (aka Sun One Studio 11)
ultrasparc64_10_11	Sun Ultra Sparc	Solaris 10	Sun C++ 5.8 (aka Sun One Studio 11) in 64bit mode (-xtarget=ultra -xarch=v9)

It will be referred to as <system> in the following text. You may need to change the provided makefiles to match your own installation requirements:

- ◆ VIEWSDIR must be set to the directory where you unpacked the product (usually /usr/ilog/viewsXX on Unix or c:\ilog\viewsxx on Windows, where XX indicates the current version of ILOG Views);
- ◆ XINC and XLIBS should be set to the directory where your X11 include and lib directories are located (only on Unix platforms);
- ◆ MINC and MLIBS should be set to the directory where your Motif include and lib directories are located (only on Unix platforms).

Platforms no Longer Supported

System name	Operating System	Compiler	Replaced by
hp32_11_3.52	HP-UX 11	C++ A.03.52 with -mt -AA options	hp32_11_3.73 requiring HP ANSI C++ A.03.73 using -mt -AA options
hp64_11_3.52	HP-UX 11	C++ A.03.52 in 64bit mode (+DA2.0W) with -mt -AA options	hp64_11_3.73 requiring HP ANSI C++ A.03.73 in 64bit mode (+DA2.0W) with -mt -AA options

System name	Operating System	Compiler	Replaced by
ia64_hpux11_5.52	HP-UX 11	HP C++/ANSI A.05.52	Not replaced
ia64_RHEL3.0_3.2	RedHat Enterprise Linux 3.0 (linux 2.4, glibc 2.3)	gcc3.2	Not replaced
x86_RHEL3.0_3.2	RedHat Enterprise Linux 3.0 (linux 2.4, glibc 2.3)	gcc3.2	x86_RHEL4.0_3.4, requiring RedHat Enterprise Linux 4.0 (or compatible), glibc2.3 and gcc3.4, or x86_sles10.0_4.1, requiring Suse 10.0 (or compatible), glibc2.4 and gcc4.1
ppc_linux2_glibc2.3_gcc3.2	Linux 2.4, glibc 2.3	gcc3.2	Not replaced
msvc7	Windows 95/98/Me, NT/2000/XP	Microsoft Visual Studio C++ .NET Standard 2002 (7.0)	x86_.net2003_7.1 (or x86_.net2005_8.0 or x86_.net2008_9.0) requiring Windows XP / Vista and Microsoft Visual C++ .NET 2003 (or 2005 or 2008)

Incompatibility with Version 5.1

The class `IlvMakePolyPointsInteractor` and its subclasses:

The method

```
virtual void react(IlvPoint& p, IlUShort modifier = 0);
```

now has one extra argument that contains the configuration of the keyboard modifiers when the event that generated the addition of a point was triggered. This extra argument enables the overridden methods to position the point depending on these modifiers.

While it is highly unlikely that this method has been overridden, if this is the case, a compile-time error will occur. In this case, the derived method's signature should simply be extended to include this extra argument.

Execution Requirements

You need to set the environment variable `ILVHOME` to the directory where the product has been installed to ensure that every provided binary works properly. Usually, you will set:

(csh/tcsh):

```
% setenv ILVHOME /usr/ilog/viewsXX
```

(sh/bash):

```
$ ILVHOME=/usr/ilog/viewsXX  
$ export ILVHOME
```

(Windows Server 2003/XP/Vista):

```
C:\> set ILVHOME=C:\ILOG\VIEWSXX
```

Please check with your system administrator the exact location where ILOG Views is installed.

Library Build Information (Unix platforms only)

If a problem occurs while running your applications, you can retrieve the information on the platform that was used to build the library by using the shell script called `ilvversion.sh`, located in the ILOG Views root directory.

Go into the specific static subplatform subdirectory of `lib` and type:

```
../../../../ilvversion.sh
```

Two lines that have the following form will be printed out (these lines may be swapped):

```
IlvVersion: X.X
```

```
IlvBuild: OS - platform - compiler - display revision
```

The shell script locates the strings `'IlvBuild'` and `'IlvVersion'` in the library file `libxviews.a` and prints out the result.

If you have installed multiple platforms in the directory `ILVHOME`, you can check each of the platforms:

```
$ cd $ILVHOME  
$ ./ilvversion.sh platform
```

where `platform` is the system identifier of the ILOG Views library (that is, the `<system>`, one of `hp32_11_3.73`, `power32_aix5.2_7.0`, and so on).

Contents

ILOG Views Studio

A ready-to-use version of ILOG Views Studio, delivered as a binary file called `ivfstudio` is provided in the `studio/<system>` directory. ILOG Views Studio is a GUI builder that will help you create and generate ILOG Views applications.

Directories

- ◆ `data/ilviews`: contains the data files used by the library (inspector panels, message databases, and so on).
- ◆ `data/images`: contains image data files.
- ◆ `data/icon`: contains some icons.
- ◆ `data/DCW`: contains some DCW-generated files.
- ◆ `bin`: contains binary files, along with source code. The `README` file in the `bin` directory explains how to build these binary files. Two useful programs can be built in `<ILVHOME>/bin/<system>`: `ilv2data`, which can build a "resource file" that can be linked with your application in order to make it environment-independent. `splitdbm`, which converts pre-3.0 message databases into the new format, including the new language definition and encoding.
- ◆ `samples`: contains sample files. You can read the `README` file by clicking here. For each sample, you need to go to the platform directory and run the `make` utility to build it.
- ◆ `tools`: contains more specific solutions to common problems.

ILOG Views Data Access: Known Incompatibilities with Version 5.2

Data Access 5.2 is source-compatible with Data Access 5.0 (with the exception of the Open Ingres database). Binary compatibility, however, is not granted. C++ code must be recompiled and programs must be relinked because the header files have been modified (for example, to support new databases).

Note that source compatibility concerns only the documented API (with the exception of APIs of databases no longer supported). Data Access 5.2 supports Oracle 9i, 10g and 11g (but it does not support Oracle 8.x and Open Ingres).

Licensing

If you have a file called `$ILVHOME/access.ilm` on Unix or `%ILVHOME%\access.ilm` on Windows, then this is an evaluation copy of ILOG Views.

You must set the environment variable `ILOG_LICENSE_FILE` to this path name to run the ILOG Views applications:

(csh/tcsh):

```
% setenv ILOG_LICENSE_FILE $ILVHOME/access.ilm
```

(sh/bash):

```
$ ILOG_LICENSE_FILE=$ILVHOME/access.ilm  
$ export ILOG_LICENSE_FILE
```

(Windows Server 2003/XP/Vista):

```
C:\> set ILOG_LICENSE_FILE=%ILVHOME%\access.ilm
```

Various Versions

The libraries are stored in subdirectories of the directory `lib/<system>` on Unix and `lib\<system>` on Windows (Server 2003/XP/Vista).

There are several library files (static and shared equivalent):

Unix platforms:

- ◆ `libxviews`: Pure Xlib code of ILOG Views.
- ◆ `libmviews`: Motif-dependent code of ILOG Views.

Windows Server 2003/XP/Vista platforms:

- ◆ `winviews.lib`: Windows-dependent code of ILOG Views.

For all platforms (the name should be prefixed with `lib` on Unix platforms, and have the `.lib` extension on Windows platforms):

- ◆ Foundation Package
 - `ilog`: ILOG utility classes (arrays, lists, and so on).
 - `views`: Core library. Includes Standard 2D graphics.
 - `ilvgadgt`: Core Gadgets library.

This library is provided with the Foundation Package, but can be used and deployed only if you have the "ILOG Views" or "ILOG Views Controls" license. This library

contains the following classes: `IlvMessageLabel`, `IlvFrame`, `IlvButton`, `IlvToggle`, `IlvColoredToggle`, `IlvComboBox`, `IlvTextField`, `IlvNumberField`, `IlvPasswordField`, `IlvPopupMenu`, `IlvToolBar`, `IlvMenuBar`, `IlvScrollBar`, `IlvSlider`, `IlvGadgetItem`, `IlvMenuItem`, `IlvGadgetContainer`, `IlvScrolledView`, `IlvDialog`, `IlvIMessageDialog`, `IlvIInformationDialog`, `IlvIErrorDialog`, `IlvIWarner`, `IlvIQuestionDialog`, `IlvGadgetContainerRectangle`, `IlvSCGadgetContainerRectangle`, `IlvSCViewRectangle`.

- `ilvmllook`: Motif Look and Feel library.
- `ilvwlook`: Windows 3.11 Look and Feel library.
- `ilvw95look`: Windows 95 Look and Feel library.
- `ilvwxplook`: Windows XP Look and Feel library (Windows only).
- `ilvprint`: Printing support library.
- `ilvbmpflt`: Bitmap Filters library.
- `ilvbmp`: BMP bitmap streamer.
- `ilvwbmp`: WBMP bitmap streamer.
- `ilvpng`: PNG bitmap streamer.
- `ilvjpg`: JPG bitmap streamer.
- `ilvppm`: PBM-PPM bitmap streamer.
- `ilvtiff`: TIFF bitmap streamer.
- `ilvrgb`: SGI RGB bitmap streamer.
- `iljs`: ILOG Script library.
- `ilvjs`: ILOG Views Script implementation.
- `iljsgide`: ILOG Script debugger interface.
- `ilvbuild`: Resource-handling classes for binaries.
- ◆ **Gadgets Package (Controls)**
 - `ilvadvgdt`: Advanced Gadgets library (`IlvMatrix`, `IlvTreeGadget`, ...).
 - `ilvadvgadmgr`: Manager classes using advanced gadgets.
 - `ilvatext`: `IlvAnnotext` and related classes.
 - `ilvedit`: Inspector classes (Color chooser, Font chooser, ...).
 - `ilvstates`: States library.
 - `ilvamlook`: Advanced Motif Look and Feel library.

- `ilvawlook`: Advanced Windows 3.11 Look and Feel library.
- `ilvaw95look`: Advanced Windows 95 Look and Feel library.
- `ilvawxplook`: Advanced Windows XP Look and Feel library (Windows only).
- `ilvprtdlg`: Printing dialogs library.
- ◆ Application Framework Package (Controls)
 - `ilvappframe`: Application Framework library.
 - `ilvappmgr`: Application Framework classes using the Manager package (`IlvDvManagerDocument` and related classes).
 - `ilvappgrapher`: Application Framework classes using the Grapher package (`IlvDvGrapherDocument` and related classes).
 - `ilvappwizard`: Application Framework library for wizard.
- ◆ Manager Package (2D Standard)
 - `ilvmgr`: Manager library (`IlvManager` and related classes).
 - `ilvgadmgr`: Manager classes using gadgets (`IlvGadgetManager` and related classes).
 - `ilvmgrprint`: Manager Printing support library.
- ◆ Data Access Add-On
 - `dataaccess`: Core Data Access libraries (was 'inform' in ILOG InForm 3.0).
 - `dbaccess`: Relational databases libraries (was 'dbinform' in ILOG InForm 3.0).
 - `dbchart`: Charts-based Data Access classes library.
 - `dbgadget`: Gadgets-based Data Access classes library.
 - `dbgantt`: Gantt Chart-based Data Access classes library.
 - `dbgraphe`: Grapher-based Data Access classes library.
 - `dbsqlgad`: Relational Databases Gadgets classes library.
- ◆ Grapher Package (Advanced 2D)
 - `ilvgrapher`: Grapher library (`IlvGrapher` and related classes).
 - `ilvgadgraph`: Grapher classes using gadgets (`IlvSCGrapherRectangle`).
- ◆ Prototypes Package (Advanced 2D)
 - `ilvproto`: Prototypes Base library.
 - `ilvgdpro`: Prototype classes using gadgets.

- ◆ Web Deployment Package (Advanced 2D)
 - `ilvweb`: Web Deployment library.
- ◆ Charts Add-On
 - `ilvcharts`: Charts library (`IlvChartGraphic` and related classes).
- ◆ Graph Layout Add-On
 - `ilvlayout`: Core Graph Layout library.
 - `ilvbus`: Bus layout library.
 - `ilvhierarchical`: Hierarchical layout library.
 - `ilvorthlink`: Orthogonal Link layout.
 - `ilvrandom`: Random layout library.
 - `ilvtree`: Tree layout library.
- ◆ Gantt Add-On
 - `ilvgantt`: Gantt Chart library (`IlvGanttChart` and related classes).
- ◆ Maps Add-On
 - `ilvmaps`: Core Maps library.
 - `ilvdbmaps`: Database-based maps library.

Using Shared Libraries

ILOG Views libraries are provided in both static and shared mode on all platforms (please see the next section for Unix Users and Motif-based libraries).

If you use shared libraries on a Unix platform, make sure the dynamic loader can find the ILOG Views libraries. You do that by setting the environment variable `LD_LIBRARY_PATH` (or `SHLIB_PATH` on HP platforms or `LIBPATH` on AIX platforms) to `$ILVHOME/lib/<system>/<shareDir>`.

If you use shared libraries on a Windows platform, make sure that the system will actually access the ILOG Views DLLs. Check the system documentation for more information.

Note for Unix Users

On Unix platforms, when you plan to link your application with ILOG Views, you have to decide whether or not it will include pure Motif code. If this is the case, then you need to link with `libmviews`.

If you need your application to be a pure Xlib application, then you need to link with `libxviews`.

Never link with both, and always link with one of these two. The library "views" is likely to be necessary for every application.

Important Note About Motif and Shared Libraries

The use of `libmviews` (Motif based) is deprecated in shared library format.

Since version 4.0, all shared libraries provided by ILOG Views are built using `libxviews` and are incompatible with `libmviews`. `libmviews` is only provided as a static library and can only be used with the static version of other ILOG Views libraries.

Note for Windows Server 2003 / XP / Vista Users

The libraries are provided in several versions on the Windows versions that are provided in subdirectories of `lib\<system>`. This is due to different versions of the run-time system libraries and to the DLL. Each version needs specific compiler flags as described below:

- ◆ `x86_.net2003_7.1:`
 - `stat_sta`: Static library in single thread with static run-time library using new IOStreams. Flags: `/GX /GR /ML /DIL_STD` (Single Threaded).
 - `stat_mta`: Static library in multithread with static run-time library using new IOStreams. Flags: `/GX /GR /MT /DIL_STD` (Multithreaded).
 - `stat_mda`: Static library in multithread with dynamic run-time library using new IOStreams. Flags: `/GX /GR /MD /DIL_STD` (Multithreaded DLL).
 - `dll_mda`: Dynamic library in multithread with dynamic run-time library using new IOStreams. Flags: `/GX /GR /MD /DIL_STD /DILVDLL` (Multithreaded DLL).
- ◆ `x86_.net2005_8.0`, `x86_.net2008_9.0` and `x64_.net2008_9.0:`
 - `stat_mta`: Static library in multithread with static run-time library using new IOStreams. Flags: `/EHsc /GR /MT /DIL_STD` (Multithreaded).
 - `stat_mda`: Static library in multithread with dynamic run-time library using new IOStreams. Flags: `/EHsc /GR /MD /DIL_STD` (Multithreaded DLL).

- `dll_mda`: Dynamic library in multithread with dynamic run-time library using new IOStreams. Flags: `/EHsc /GR /MD /DIL_STD /DILVDDL` (Multithreaded DLL).

Notes:

1. You must also use the flag `/DILJSTDH` if you want to use ILOG Script in these modes.
2. You must also link with the system libraries `wsock32.lib` and `imm32.lib`.

Note for Microsoft Visual C++ Users

For all your projects, make sure that `wsock32.lib` and `imm32.lib` are specified in the link command line.

To debug your program more easily, add the following lines to the section `[AutoExpand]` of the file

```
x86_net2003_7.1, x86_net2005_8.0, x86_net2008_9.0 or x64_net2008_9.0:
%INSTALLDIR%\Common7\Packages\Debugger\autoexp.dat
```

```
; from Ilog Views
IlvRect =x = <_orig._x,d> y = <_orig._y,d> width = <_w,u> height = <_h,u>
IlvPoint =x = <_x,d> y = <_y,d>
IlvTransformer =x11 = <_x11,g> x12 = <_x12,g> x21 = <_x21,g> x22 = <_x22,g> x0
= <_x0,g> y0 = <_y0,g>
```

These lines let you display the values of the objects that these classes define (instead of their address) in the tooltip that appears when the mouse is positioned over a variable.

You may get a series of link errors when using the Visual C++ 6.0 integrated development environments to build your project in Debug mode.

In Debug mode, to be able to link your application with Visual C++ and the libraries provided in ILOG Views, follow these instructions:

```
x86_net2003_7.1, x86_net2005_8.0, x86_net2008_9.0 or x64_net2008_9.0:
```

- in Microsoft Visual Studio.NET, select your projects in the "Solution Explorer" window,
- right-click on the selection and choose the "Properties" item,
- in the "Property Pages" window, select "Configuration Properties" -> "C/C++" -> "Preprocessor",
- in the "Preprocessor Definitions" field, remove "_DEBUG",
- recompile and relink the application.

Release Notes for Version 5.1

Note for users of previous releases of ILOG Views

All known incompatibilities of this version of ILOG Views with previous versions are described in the file `COMPAT.TXT` that you can find in the same directory as this `README` file.

Please read it if you have any problems compiling or running your old applications.

Technical Support

If you have problems using the ILOG Views libraries and if the documentation set does not help you fix your problem, please send a bug report to the ILOG support team, using the template provided in the file `BUGREPORT`, or `bugreprt.txt` if you are using a Windows platform.

Compilation

ILOG Views is delivered with a set of libraries that are stored in a directory that depends on the type of machine you are using, the operating system it runs on and the compiler you plan to use.

This directory can be one of:

System name	Hardware	Operating System	Compiler
alpha_5.1_6.5	HP/Compaq (DEC) Alpha	Tru64 UNIX (OSF1) V5.1 or higher	C++ 6.5 or higher
hp32_11_3.52	HP 9700	HP-UX 11 or higher	HP HP ANSI C++ A.03.52 or higher using -mt -AA options
hp64_11_3.52	HP 9700	HP-UX 11 or higher	HP ANSI C++ A.03.52 or higher in 64bit mode (+DA2.0W) using -mt -AA options
ia64_hpux11_5.52	ia64 (Itanium 2)	HP-UX 11 or higher	HP aC++/ANSI A.05.52 or higher
ia64_RHEL3.0_3.2	ia64 (Itanium 2)	RedHat Enterprise Linux 3.0 (linux 2.4, glibc 2.3)	gcc3.2
x86_RHEL3.0_3.2	x86	RedHat Enterprise Linux 3.0 (linux 2.4, glibc 2.3)	gcc3.2
ppc_linux2_glibc2.3_gcc3.2	PowerPC	Linux 2.4, glibc 2.3	gcc3.2
msvc7	x86	Windows 95/98/Me, or Windows NT/2000/XP	Microsoft C++ 7.0
x86_.net2003_7.1	x86	Windows 95/98/Me, or Windows NT/2000/XP	Microsoft Visual C++ .NET 2003
rs6000_5.1_6.0	RS6000	AIX 5.1 or higher	Visual Age 6.0 using standard C++ streams (-DIL_STD)
ultrasparc32_8_6.2	Sun Ultra Sparc	Solaris 2.8 or higher	Sun C++ 5.3 (Forte 6.2) or higher
ultrasparc64_8_6.2	Sun Ultra Sparc	Solaris 2.8 or higher	Sun C++ 5.3 (Forte 6.2) or higher in 64bit mode (-xtarget=ultra -xarch=v9)

It will be referred to as <system> in the following text. You may need to change the provided makefiles to match your own installation requirements:

- ◆ VIEWSDIR must be set to the directory where you unpacked the product (usually /usr/ilog/viewsXX on Unix or c:\ilog\viewsxx on Windows, where XX indicates the current version of ILOG Views);

- ◆ XINC and XLIBS should be set to the directory where your x11 include and lib directories are located (only on Unix platforms);
- ◆ MINC and MLIBS should be set to the directory where your Motif include and lib directories are located (only on Unix platforms).

Platforms no Longer Supported

System name	Operating System	Compiler	Replaced by
alpha_4_6.1	HP/Compaq/DEC Alpha, OSF1 V4	C++ 6.1	alpha_5.1_6.5 requiring Tru64 UNIX (OSF1) V5.1 and C++ 6.5
2_11_3.05	HP 9700, HP-UX 11	C++ 3.05	hp32_11_3.52 requiring HP ANSI C++ 3.52 and -mt -AA options
hp32_11_3.30	HP 9700, HP-UX 11	C++ A.03.30 with -mt -AA options	hp32_11_3.52 requiring HP ANSI C++ 3.52
hp64_11_3.15	HP 9700, HP-UX 11	C++ A.03.15	hp64_11_3.52, requiring HP ANSI C++ A.03.52 and -mt -AA options
hp64_11_3.39	HP 9700, HP-UX 11	C++ A.03.15 with -mt -AA options	hp64_11_3.52, requiring HP ANSI C++ A.03.52
i86_linux2_glibc2.2_gc c3.0	i86, Linux 2.4, glibc 2.2	gcc3.0.2	x86_RHEL3.0_3.2, requiring RedHat Enterprise Linux 3.0 (or compatible), glibc2.3 and gcc3.2
i86_linux2_glibc2.3_gc c3.2	i86, Linux 2.4, glibc 2.3	gcc3.2	x86_RHEL3.0_3.2, requiring RedHat Enterprise Linux 3.0 (or compatible), glibc2.3 and gcc3.2
rs6000_4.3_3.6	RS6000, AIX 4.3.2	CSet++ 3.6	rs6000_5.1_6.0 requiring AIX 5.1, Visual Age 6.0 and standard C++ streams (-DIL_STD)
sparc_5_5.0	Sparc, Solaris 2.4	Sun C++ 5.0	ultrasparc32_8_6.2 requiring Solaris 2.8 and Forte 6.2 (Sun C++ 5.3)

System name	Operating System	Compiler	Replaced by
ultrasparc64_5_5.0	Ultra Sparc, Solaris 2.7	Sun C++ 5.0	ultrasparc64_8_6.2 requiring Solaris 2.8 and Forte 6.2 (Sun C++ 5.3)
msvc6	x86 Windows 95/98/Me or NT/2000/XP	Microsoft Visual C++ 6.x	x86_.net2003_7.1 requiring Microsoft Visual C++ .NET 2003

Execution Requirements

You need to set the environment variable `ILVHOME` to the directory where the product has been installed to ensure that every provided binary works properly. Usually, you will set:

(csh/tcsh):

```
% setenv ILVHOME /usr/ilog/viewsXX
```

(sh/bash):

```
$ ILVHOME=/usr/ilog/viewsXX
$ export ILVHOME
```

(Windows 95/98/Me / Windows NT/2000/XP):

```
C:\> set ILVHOME=C:\ILOG\VIEWSXX
```

Please check with your system administrator the exact location where ILOG Views is installed.

Library Build Information (Unix platforms only)

If a problem occurs while running your applications, you can retrieve the information on the platform that was used to build the library by using the shell script called `ilvversion.sh`, located in the ILOG Views root directory.

Go into the specific static subplatform subdirectory of `lib` and type:

```
../../../../ilvversion.sh
```

Two lines that have the following form will be printed out (these lines may be swapped):

IlvVersion: X.X

```
IlvBuild: OS - platform - compiler - display revision
```

The shell script locates the strings 'IlvBuild' and 'IlvVersion' in the library file `libxviews.a` and prints out the result.

If you have installed multiple platforms in the directory `ILVHOME`, you can check each of the platforms:

```
$ cd $ILVHOME
$ ./ilvversion.sh platform
```

where `platform` is the system identifier of the ILOG Views library (that is, the `<system>`, one of `hp32_11_3.52`, `rs6000_5.1_6.0`, and so on).

Contents

ILOG Views Studio

A ready-to-use version of ILOG Views Studio, delivered as a binary file called `ivfstudio` is provided in the `studio/<system>` directory. ILOG Views Studio is a GUI builder that will help you create and generate ILOG Views applications.

Directories

- ◆ `data/ilviews`: contains the data files used by the library (inspector panels, message databases, and so on).
- ◆ `data/images`: contains image data files.
- ◆ `data/icon`: contains some icons.
- ◆ `data/DCW`: contains some DCW-generated files.
- ◆ `bin`: contains binary files, along with source code. The `README` file in the `bin` directory explains how to build these binary files. Two useful programs can be built in `<ILVHOME>/bin/<system>`: `ilv2data`, which can build a "resource file" that can be linked with your application in order to make it environment-independent. `splitdbm`, which converts pre-3.0 message databases into the new format, including the new language definition and encoding.
- ◆ `samples`: contains sample files. You can read the `README` file by clicking here. For each sample, you need to go to the platform directory and run the `make` utility to build it.
- ◆ `tools`: contains more specific solutions to common problems.

ILOG Views Data Access: Known Incompatibilities with Version 5.0

Data Access 5.1 is source-compatible with Data Access 5.0. However, binary compatibility is not granted. C++ code must be recompiled and programs must be relinked because the header files have been modified (for example, to support Oracle 9i).

Note that source compatibility concerns only the documented API. Data Access 5.1 does not support Oracle 7.3 and Oracle 8.0, but it supports Oracle 9i. Users of Oracle10.x can use the Oracle 9i client to access the Oracle database.

The databases for the `ppc_linux2_glibc2.3_gcc3.2` platform have not been tested as we do not have any database client for this platform.

Licensing

If you have a file called `$ILVHOME/access.ilm` on Unix or `%ILVHOME%\access.ilm` on Windows, then this is an evaluation copy of ILOG Views.

You must set the environment variable `ILOG_LICENSE_FILE` to this path name to run the ILOG Views applications:

(csh/tcsh):

```
% setenv ILOG_LICENSE_FILE $ILVHOME/access.ilm
```

(sh/bash):

```
$ ILOG_LICENSE_FILE=$ILVHOME/access.ilm  
$ export ILOG_LICENSE_FILE
```

(Windows 95/98/Me / Windows NT/2000/XP):

```
C:\> set ILOG_LICENSE_FILE=%ILVHOME%\access.ilm
```

Various Versions

The libraries are stored in subdirectories of the directory `lib/<system>` on Unix and `lib\<system>` on Windows (95/98/Me, and NT/2000/XP).

There are several library files (static and shared equivalent):

Unix platforms:

- ◆ `libxviews`: Pure Xlib code of ILOG Views.
- ◆ `libmviews`: Motif-dependent code of ILOG Views.

Windows 95/98/Me, and NT/2000/XP platforms:

- ◆ `winviews.lib`: Windows-dependent code of ILOG Views.

For all platforms (the name should be prefixed with `lib` on Unix platforms, and have the `.lib` extension on Windows platforms):

- ◆ Foundation Package

- `ilog`: ILOG utility classes (arrays, lists, and so on).
- `views`: Core library. Includes Standard 2D graphics.
- `ilvgadgt`: Core Gadgets library.

This library is provided with the Foundation Package, but can be used and deployed only if you have the "ILOG Views" or "ILOG Views Controls" license. This library contains the following classes: `IlvMessageLabel`, `IlvFrame`, `IlvButton`, `IlvToggle`, `IlvColoredToggle`, `IlvComboBox`, `IlvTextField`, `IlvNumberField`, `IlvPasswordField`, `IlvPopupMenu`, `IlvToolBar`, `IlvMenuBar`, `IlvScrollBar`, `IlvSlider`, `IlvGadgetItem`, `IlvMenuItem`, `IlvGadgetContainer`, `IlvScrolledView`, `IlvDialog`, `IlvIMessageDialog`, `IlvIInformationDialog`, `IlvIErrorDialog`, `IlvIWarner`, `IlvIQuestionDialog`, `IlvGadgetContainerRectangle`, `IlvSCGadgetContainerRectangle`, `IlvSCViewRectangle`.

- `ilvmllook`: Motif Look and Feel library.
- `ilvwlook`: Windows 3.11 Look and Feel library.
- `ilvw95look`: Windows 95 Look and Feel library.
- `ilvwxplook`: Windows XP Look and Feel library (Windows only).
- `ilvprint`: Printing support library.
- `ilvbmpflt`: Bitmap Filters library.
- `ilvbmp`: BMP bitmap streamer.
- `ilvwbmp`: WBMP bitmap streamer.
- `ilvpng`: PNG bitmap streamer.
- `ilvjpg`: JPG bitmap streamer.
- `ilvppm`: PBM-PPM bitmap streamer.
- `ilvtiff`: TIFF bitmap streamer.
- `ilvrgb`: SGI RGB bitmap streamer.
- `iljs`: ILOG Script library.
- `ilvjs`: ILOG Views Script implementation.
- `iljsgide`: ILOG Script debugger interface.

- `ilvbuild`: Resource-handling classes for binaries.
- ◆ **Gadgets Package (Controls)**
 - `ilvadvgdt`: Advanced Gadgets library (`IlvMatrix`, `IlvTreeGadget`, ...).
 - `ilvadvgadmgr`: Manager classes using advanced gadgets.
 - `ilvatext`: `IlvAnnotext` and related classes.
 - `ilvedit`: Inspector classes (Color chooser, Font chooser, ...).
 - `ilvstates`: States library.
 - `ilvamlook`: Advanced Motif Look and Feel library.
 - `ilvawlook`: Advanced Windows 3.11 Look and Feel library.
 - `ilvaw95look`: Advanced Windows 95 Look and Feel library.
 - `ilvawxplook`: Advanced Windows XP Look and Feel library (Windows only).
 - `ilvprtdlg`: Printing dialogs library.
- ◆ **Application Framework Package (Controls)**
 - `ilvappframe`: Application Framework library.
 - `ilvappmgr`: Application Framework classes using the Manager package (`IlvDvManagerDocument` and related classes).
 - `ilvappgrapher`: Application Framework classes using the Grapher package (`IlvDvGrapherDocument` and related classes).
 - `ilvappwizard`: Application Framework library for wizard.
- ◆ **Manager Package (2D Standard)**
 - `ilvmgr`: Manager library (`IlvManager` and related classes).
 - `ilvgadmgr`: Manager classes using gadgets (`IlvGadgetManager` and related classes).
 - `ilvmgrprint`: Manager Printing support library.
- ◆ **Data Access Add-On**
 - `dataaccess`: Core Data Access libraries (was 'inform' in ILOG InForm 3.0).
 - `dbaccess`: Relational databases libraries (was 'dbinform' in ILOG InForm 3.0).
 - `dbchart`: Charts-based Data Access classes library.
 - `dbgadget`: Gadgets-based Data Access classes library.
 - `dbgantt`: Gantt Chart-based Data Access classes library.

- `dbgraphe`: Grapher-based Data Access classes library.
- `dbsqlgad`: Relational Databases Gadgets classes library.
- ◆ **Grapher Package (Advanced 2D)**
 - `ilvgrapher`: Grapher library (`IlvGrapher` and related classes).
 - `ilvgadgraph`: Grapher classes using gadgets (`IlvSCGrapherRectangle`).
- ◆ **Prototypes Package (Advanced 2D)**
 - `ilvproto`: Prototypes Base library.
 - `ilvgdpro`: Prototype classes using gadgets.
- ◆ **Web Deployment Package (Advanced 2D)**
 - `ilvweb`: Web Deployment library.
- ◆ **Charts Add-On**
 - `ilvcharts`: Charts library (`IlvChartGraphic` and related classes).
- ◆ **Graph Layout Add-On**
 - `ilvlayout`: Core Graph Layout library.
 - `ilvbus`: Bus layout library.
 - `ilvhierarchical`: Hierarchical layout library.
 - `ilvorthlink`: Orthogonal Link layout.
 - `ilvrandom`: Random layout library.
 - `ilvtree`: Tree layout library.
- ◆ **Gantt Add-On**
 - `ilvgantt`: Gantt Chart library (`IlvGanttChart` and related classes).
- ◆ **Maps Add-On**
 - `ilvmaps`: Core Maps library.
 - `ilvdbmaps`: Database-based maps library.

Using Shared Libraries

ILOG Views libraries are provided in both static and shared mode on all platforms (please see the next section for Unix Users and Motif-based libraries).

If you use shared libraries on a Unix platform, make sure the dynamic loader can find the ILOG Views libraries. You do that by setting the environment variable `LD_LIBRARY_PATH` (or `SHLIB_PATH` on HP platforms or `LIBPATH` on AIX platforms) to `$ILVHOME/lib/<system>/<shareDir>`.

If you use shared libraries on a Windows platform, make sure that the system will actually access the ILOG Views DLLs. Check the system documentation for more information.

Note for Unix Users

On Unix platforms, when you plan to link your application with ILOG Views, you have to decide whether or not it will include pure Motif code. If this is the case, then you need to link with `libmviews`.

If you need your application to be a pure Xlib application, then you need to link with `libxviews`.

Never link with both, and always link with one of these two. The library "views" is likely to be necessary for every application.

Important Note About Motif and Shared Libraries

The use of `libmviews` (Motif based) is deprecated in shared library format.

Since version 4.0, all shared libraries provided by ILOG Views are built using `libxviews` and are incompatible with `libmviews`. `libmviews` is only provided as a static library and can only be used with the static version of other ILOG Views libraries.

Note for Windows 95/98/Me, and NT/2000/XP Users

The libraries are provided in several versions on the Windows versions that are provided in subdirectories of `lib\<system>`. This is due to different versions of the run-time system libraries and to the DLL. Each version needs specific compiler flags as described below:

- ◆ `msvc7` and `x86_.net2003_7.1`:
 - `stat_sta`: Static library in single thread with static run-time library using new IOStreams. Flags: `/GX /GR /ML /DIL_STD` (Single Threaded).
 - `stat_mta`: Static library in multithread with static run-time library using new IOStreams. Flags: `/GX /GR /MT /DIL_STD` (Multithreaded).
 - `stat_mda`: Static library in multithread with dynamic run-time library using new IOStreams. Flags: `/GX /GR /MD /DIL_STD` (Multithreaded DLL).

- `dll_mda`: Dynamic library in multithread with dynamic run-time library using new IOStreams. Flags: `/GX /GR /MD /DIL_STD /DILVDLL` (Multithreaded DLL).

Notes:

1. You must also use the flag `/DILJSTDH` if you want to use *ILOG Script* in these modes.
2. You must also link with the system libraries `wsock32.lib` and `imm32.lib`.

Known Problems with Windows 95

The following problems may occur in certain configurations of Windows 95:

- ◆ Some top windows may leave traces around themselves when they become hidden. This problem seems to arise from some video driver configurations (see, in the Windows 95 online documentation, the notes about KB Windows 95, "ATI Mach 64 Display Adapter Produces Garbled Screen," PSS-ID Q134487, 21 Aug 1995).

A possible workaround to avoid this problem is:

1. Select "System" from the "Setting" menu. The "System Properties" configuration panel appears.
 2. Choose the "Performance" Tab.
 3. Click the "Graphics..." button. The "Advanced Graphics Settings" panel appears.
 4. Move the "Hardware Acceleration" slider to a lower value. This slider indicates the performance level of the video driver, from None to Full.
- ◆ Programs seem to be locked when they try to read a CD-ROM drive that has no CD inside. The system should display a modal error box, as on other Windows platforms, but it does not (even though it waits for an answer). The workaround is to put a CD in the drive, even after the system is locked.
 - ◆ Programs built with Borland C++ may crash when Windows Plus is installed (it is pointed out in the Borland 5.0 installation notice). It seems to occur during the use of iostream and floating point operations. Deactivate the Windows Plus Agent to run ILOG Views applications, or get the patches for Windows Plus from the Microsoft Network, or on the Microsoft anonymous server (`ftp.microsoft.com`), in `softlib/mslfiles`, get the file called `plusupd1.exe`.

Note for Microsoft Visual C++ Users

For all your projects, make sure that `wsock32.lib` and `imm32.lib` are specified in the link command line.

To debug your program more easily, add the following lines to the section [AutoExpand] of the file

```
msvc7 or x86_.net2003_7.1:
  %INSTALLDIR%\Common7\Packages\Debugger\autoexp.dat

; from Ilog Views
IlvRect =x = <_orig._x,d> y = <_orig._y,d> width = <_w,u> height = <_h,u>
IlvPoint =x = <_x,d> y = <_y,d>
IlvTransformer =x11 = <_x11,g> x12 = <_x12,g> x21 = <_x21,g> x22 = <_x22,g> x0
= <_x0,g> y0 = <_y0,g>
```

These lines let you display the values of the objects that these classes define (instead of their address) in the tooltip that appears when the mouse is positioned over a variable.

You may get a series of link errors when using the Visual C++ 6.0 integrated development environments to build your project in Debug mode.

In Debug mode, to be able to link your application with Visual C++ and the libraries provided in ILOG Views, follow these instructions:

```
msvc7 or x86_.net2003_7.1:
```

- in Microsoft Visual Studio.NET, select your projects in the "Solution Explorer" window,
- right-click on the selection and choose the "Properties" item,
- in the "Property Pages" window, select "Configuration Properties" -> "C/C++" -> "Preprocessor",
- in the "Preprocessor Definitions" field, remove "_DEBUG",
- recompile and relink the application.

Release Notes for Version 5.0.1

These release notes describe the changes that have been made to ILOG Views since version 5.0. This document describes:

- ◆ *Changes Since Version 5.0*
- ◆ *Corrected Patches Since Version 5.0*

Changes Since Version 5.0

Note: *All known incompatibilities in this version of ILOG Views compared to previous versions are described in the file COMPAT.TXT located at the same location as the product README files.*

Please read it if you have any problems compiling or running your old applications.

If you have problems using the ILOG Views libraries, and if the documentation does not help you fix your problem, please send a bug report to the ILOG support team, using the template provided in the file BUGREPORT, or bugreprt.txt if you are using a Windows platform.

Compilation issues

ILOG Views is delivered with a set of libraries that are stored in a directory that depends on the type of machine you are using, the operating system it runs on, and the compiler you plan to use. This directory can be one of the following:

alpha_4_6.1	Machine: Compaq (DEC) Alpha OS: OSF1 V4 or higher Compiler: C++ 6.1 or higher
hp32_11_3.05	Machine: HP 9700 OS: HP-UX 11 or higher Compiler: HP C++ A.03.05 or higher
hp32_11_3.30	Machine: HP 9700 OS: HP-UX 11 or higher Compiler: HP C++ A.03.30 or higher using -mt -AA options
hp64_11_3.15	Machine: HP 9700 OS: HP-UX 11 or higher Compiler: HP C++ A.03.15 or higher in 64 bit mode (+DA2.0W)
hp32_11_3.39	M i86_linux2_glibc2.2_gcc3.0: Machine: PC OS: Linux 2.4 or higher (glibc 2.2) Compiler: gcc3.0.2
i86_linux2_glibc2.3_gcc3.2	Machine: PC OS: Linux 2.4 or higher (glibc 2.3) Compiler: gcc3.2
msvc6	Machine: PC OS: Windows 95/98/Me or Windows NT/2000/XP Compiler: Microsoft Visual C++ 6.x
msvc7	Machine: PC OS: Windows 95/98/Me or Windows NT/2000/XP Compiler: Microsoft Visual C++ 7.0

x86_net2003_7.1	Machine: PC OS: Windows 95/98/Me or Windows NT/2000/XP Compiler: Microsoft Visual C++ .NET 2003
rs6000_4.3_3.6	Machine: RS6000 OS: AIX 4.3.2 or higher Compiler: CSet++ (3.6 or higher) or Visual Age 5.0
rs6000_5.1_6.0	Machine: RS6000 OS: AIX 5.1 or higher Compiler: Visual Age 6.0 (using standard C++ streams (-DIL_STD))
sparc_5_5.0	machine: Sun Sparc Station OS: Solaris 2.4 or higher Compiler: Sun C++ 5.0 (Patch 1 M07311-05 or higher)
ultrasparc64_5_5.0	Machine: Sun Ultra Sparc Station OS: Solaris 2.7 or higher Compiler: Sun C++ 5.0 (Patch 107311-05) or higher

The operating system will be referred to as <system> in the following text.

You may need to change the provided makefiles to match your specific installation requirements:

- ◆ VIEWSDIR must be set to the directory where you unpacked the product (usually /usr/ilog/viewsXX on Unix or c:\ilog\viewsxx on Windows, where XX indicates the current version of ILOG Views);
- ◆ XINC and XLIBS should be set to the directory where your X11 include and lib directories are located (only on Unix platforms)
- ◆ MINC and MLIBS should be set to the directory where your Motif include and lib directories are located (only on Unix platforms);

Platforms no longer supported

The following table lists the platforms that are no longer supported:

hp_10_1.0:	HP-UX 10, HP aC++ Replaced by hp32_11_3.05 or hp32_11_3.30, requiring HP-UX 11.
i86_linux2_glibc2.1_egcs1.1	Linux 2.0, Egcs 1.1. Replaced by i86_linux2_glibc2.2_gcc3.0
sgi32_6.5_7.2	IRIX platforms are no longer supported.
sparc_5_4.0	Solaris 2.4, Sun C++ 4.0. Replaced by sparc_5_5.0 or ultrasparc64_5_5.0, requiring Sun C++ 5.0 (or higher)
rs6000	AIX 3.2, CSet++ 2.1. Replaced by rs6000_4.3_3.6, requiring AIX 4.3 or higher

Execution Requirements

To ensure that every binary provided works properly, you need to set the environment variable `ILVHOME` to the directory where the product has been installed. Usually, you will set:

```
(csh/tcsh) :  
    % setenv ILVHOME /usr/ilog/viewsXX  
(sh/bash) :  
    $ ILVHOME=/usr/ilog/viewsXX  
    $ export ILVHOME  
(Windows 95/98/Me / Windows NT/2000/XP) :  
    C:\> set ILVHOME=C:\ILOG\VIEWSXX
```

Check with your system administrator the exact product installation directory.

Library build information (Unix platforms only)

If a problem occurs while running your applications, you can retrieve the information on the platform that has been used to build the library, using the shell script called `ilvversion.sh`, located in the ILOG Views root directory.

Go into the specific static subplatform subdirectory of 'lib', and type:

```
../../../../ilvversion.sh
```

Two lines that have the following form will be printed out (these lines may be swapped):


```
IlvVersion: X.X
```

```
IlvBuild: OS - platform - compiler - display revision
```

The shell script just locates the strings `IlvBuild` and `IlvVersion` in the library file `libxviews.a`, and prints out the result.

If you have installed multiple platforms in the directory `ILVHOME`, you can check each of the platforms:

```
$ cd $ILVHOME
```

```
$ ./ilvversion.sh platform
```

where `platform` is the system identifier of the ILOG Views library (that is, the `<system>`, one of `hp32_11_3.30`, `rs6000_4.3_3.6`, `sparc_5_5.0...`).

Changes in ILOG Views Studio

A ready-to-use version of ILOG Views Studio, delivered as a binary file called "ivfstudio" is provided in the `studio/<system>` directory.

ILOG Views Studio is a GUI builder that will help you create and generate ILOG Views applications.

Directories

- ◆ `data/ilviews`: Contains the data files used by the library (inspector panels, message databases, and so on).
- ◆ `data/images`: Contains image data files.
- ◆ `data/icon`: Contains some icons.
- ◆ `data/DCW`: Contains some DCW-generated files.
- ◆ `bin`: Contains binary files, along with source code.

The README file in the `bin` directory explains how to build these binary files.

Two useful programs can be built in `<ILVHOME>/bin/<system>`:

- `ilv2data`, which can build a "resource file" that can be linked with your application in order to make it environment-independent.
- `splitdbm`, which converts pre-3.0 message databases into the new format, including the new language definition, and encoding.
- ◆ `samples`: contains sample files.

For each sample, you need to go to the platform directory and run the `make` utility to build it.

- ◆ `tools`: contains more specific solutions to common problems.

Licensing

If you have a file called `$ILVHOME/access.ilm` on Unix or `%ILVHOME%\access.ilm` on Windows, then this is an evaluation copy of ILOG Views.

You must set the environment variable `ILOG_LICENSE_FILE` to this path name to run the ILOG Views applications.

```
(csh/tcsh):
    % setenv ILOG_LICENSE_FILE $ILVHOME/access.ilm
(sh/bash):
    $ ILOG_LICENSE_FILE=$ILVHOME/access.ilm
    $ export ILOG_LICENSE_FILE
(Windows 95/98/Me / Windows NT/2000/XP):
    C:\> set ILOG_LICENSE_FILE=%ILVHOME%\access.ilm
```

Various Versions

The libraries are stored in subdirectories of the directory `lib/<system>` on Unix and `lib\<system>` on Windows (95/98/Me, and NT/2000/XP).

There are several library files (static and shared equivalent):

◆ Unix platforms:

`libxviews`: Pure Xlib code of ILOG Views.

`libmviews`: Motif-dependent code of ILOG Views.

◆ Windows 95/98/Me, and NT/2000/XP platforms:

`winviews.lib`: Windows-dependent code of ILOG Views.

For all platforms (the name should be prefixed with 'lib' on Unix platforms, and have the `lib` extension on Windows platforms):

Library Name	Description
	<code>ilog</code> : ILOG utility classes (arrays, lists...)
ILOG utility classes (arrays, lists...)	<code>ilvmlook</code> : <code>ilvwlook</code> : <code>ilvw95look</code> : <code>ilvwxplook</code> :
Gadgets package (Controls)	
Application Framework package (Controls)	

Library Name	Description
Manager Package (2D Standard)	
Grapher Package (Advanced 2D)	
Prototypes Package (Advanced 2D)	
Web Deployment package (Advanced 2D)	
Data Access add-on	
Charts add-on	Charts library (<code>IlvChartGraphic</code> and related classes)
Graph Layout add-on	
Gantt add-on	<code>ilvGantt</code> : Gantt Chart library (<code>IlvGanttChart</code> and related classes)
Maps add-on	

Using Shared Libraries

ILOG Views libraries are provided in both static and shared mode on all platforms (please see the next section for Unix Users and Motif-based libraries).

If you use shared libraries on a Unix platform, make sure the dynamic loader can find the ILOG Views libraries. You do that by setting the environment variable `LD_LIBRARY_PATH` (or `SHLIB_PATH` on HP platforms or `LIBPATH` on AIX platforms) to `$ILVHOME/lib/<system>/<shareDir>`.

If you use shared libraries on a Windows platform, make sure that the system will actually access the ILOG Views DLLs. Check the system documentation for more information

Note for Unix Users

On Unix platforms, when you plan to link your application with ILOG Views, you have to decide whether or not it will include pure Motif code. If this is the case, you need to link with `libmviews`. If you need your application to be a pure Xlib application, you need to link with `libxviews`. Never link with both, and always link with one of these two. The library "views" is likely to be necessary for every application.

Important Note about Motif and Shared Libraries

The use of `libmviews` (Motif based) is deprecated in shared library format.

Since version 4.0, all shared libraries provided by ILOG Views are built using `libxviews` and are incompatible with `libmviews`. `libmviews` is only provided as a static library and can only be used with the static version of other ILOG Views libraries.

Note for Windows 95/98/Me, and NT/2000/XP Users

The libraries are provided in several versions on the Windows versions that are provided in subdirectories of `lib\<system>`. This is due to different versions of the run-time system libraries and to the DLL.

Each version needs specific compiler flags, as described below:

- ◆ `msvc6 & msvc7 & x86_net2003_7.1`:
 - `stat_sta`: Static library in single thread with static run-time library using new IOStreams.
Flags: `/GX /GR /ML /DIL_STD` (Single Threaded).
 - `stat_mta`: Static library in multithread with static run-time library using new IOStreams.
Flags: `/GX /GR /MT /DIL_STD` (Multithreaded).
 - `stat_mda`: Static library in multithread with dynamic run-time library using new IOStreams.
Flags: `/GX /GR /MD /DIL_STD` (Multithreaded DLL).
 - `dll_mda`: Dynamic library in multithread with dynamic run-time library using new IOStreams.
Flags: `/GX /GR /MD /DIL_STD /DILVDLL` (Multithreaded DLL).

You must also use the flag `/DILJSTDH` if you want to use ILOG Script in these modes.

Note:

- ◆ `msvc6` only:
 - `stat_st`: Static library in single thread with static run-time library.
Flags: `/ML` (Single Threaded).
 - `stat_mt`: Static library in multithread with static run-time library.
Flags: `/MT` (Multithreaded).
 - `stat_md`: Static library in multithread with dynamic run-time library.
Flags: `/MD` (Multithreaded DLL).
 - `dll_md`: Dynamic library in multithread with dynamic run-time library.
Flags: `/MD /DILVDLL` (Multithreaded DLL).

You must also use the flag `/DILJSTDH` if you want to use ILOG Script in these modes.

Note: You must also link with the system libraries `wsock32.lib` and `imm32.lib`

Known problems with Windows 95

The following problems may occur in certain configurations of Windows 95:

Some top windows may leave traces around themselves when they become hidden. This problem seems to arise from some video driver configurations (see, in the Windows 95 online documentation, the notes about KB Windows 95, "ATI Mach 64 Display Adapter Produces Garbled Screen," PSS-ID Q134487, 21 Aug 1995).

A possible workaround to avoid this problem is to do the following:

1. Select "System" from the "Setting" menu. The "System Properties" configuration panel appears.
2. Choose the "Performance" Tab.
3. Click the "Graphics..." button. The "Advanced Graphics Settings" panel appears.
4. Move the "Hardware Acceleration" slider to a lower value. This slider indicates the performance level of the video driver, from None to Full.

Programs seem to be locked when they try to read a CD-ROM drive that has no CD inside. The system should display a modal error box, as on other Windows platforms, but it does not (even though it waits for an answer). The workaround is to put a CD in the drive, even after the system is locked.

Note for Microsoft Visual C++ users

- ◆ For all your projects, make sure that `wsock32.lib` and `imm32.lib` are specified in the link command line.
- ◆ To debug your program more easily, add the following lines to the section [AutoExpand] of the file :

For `msvc6`:

For `msvc7` or `x86_.net2003_7.1`:

These lines let you visualize the values of the objects that these classes define (instead of their address) in the tooltip that appears when the mouse is positioned over a variable.

You may get a series of link errors when using the Visual C++ 6.0 integrated development environments to build your project in Debug mode.

In Debug mode, to be able to link your application with Visual C++ and the libraries provided in ILOG Views, follow these instructions:

◆ On `msvc6`:

1. In Developer Studio, choose the menu option "Project" -> "Settings...".
2. Make sure you select all your Debug projects in the "Settings for..." panel.
3. Select the "C/C++" notebook tab.
4. In this page, select the "Preprocessor" option of the "Category" option menu.
5. In the "Preprocessor definitions:" entry field, remove "_DEBUG".
6. Recompile and relink the application.

◆ On `msvc7` or `x86_.net2003_7.1`:

1. In Microsoft Visual Studio.NET, select your projects in the Solution Explorer window
2. Right-click on the selection and choose the Properties item
3. In the Property Pages window, select Configuration Properties -> C/C++ -> Preprocessor
4. In the Preprocessor Definitions field, remove _DEBUG
5. Recompile and relink the application.

Corrected Patches Since Version 5.0

PATCH 50.0001

Description: Views 4.02 forces the use of buffered drawing operations on gadget containers.

Libraries: `views, ilvgadgt, ilvmgr`

Packages: `foundation, manager`

PATCH 50.0002

Description: Menu Items of combo boxes may stay on the screen when using the 'fade item' feature of Windows.

Libraries: `ilvgadgt`

Packages: `foundation`

PATCH 50.0003

Description: On X11, `IlvAbstractView::setSensitive` doesn't propagate to its children views.

Libraries: `xviews`

Packages: `foundation`

PATCH 50.0004

Description: [dialogs] `IlvFileBrowser::setFileName` is no longer taken into account since patch 40.2045

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0005

Description: Error with serialization of boolean values.

Libraries: `ilvcharts, ilvgantt, ilvgrapher, ilvproto, ilvweb, views`

Packages: `charts, gantt, grapher, protos, web, foundation`

PATCH 50.0006

Description: Last page may be previewed several times.

Libraries: `ilvprint`

Packages: `foundation`

PATCH 50.0007

Description: [layout] quadtree errors when using `IlvBus Layout::setBus` method.

[layout] no pragma which force the library link on PC

Libraries: ilvbus

Other files:

include/ilviews/layout/macros.h, include/ilviews/layout/bus.h,
include/ilviews/layout/hierarchical.h, include/ilviews/layout/
orthlink.h, include/ilviews/layout/random.h, include/ilviews/
layout/tree.h

Packages: layout, appframe

PATCH 50.0008

Description: stretchBitmapData does not work in 8 bits.

Libraries: xviews, mviews, winviews

Packages: foundation

PATCH 50.0009

Description: IlvFilterFlow tries to load an empty filter using modules.

Libraries: xviews, mviews, winviews

Packages: foundation

PATCH 50.0010

Description: IlvIndexedBitmapData does not handle rectangular copy.

Libraries: xviews, mviews, winviews

Packages: foundation

PATCH 50.0011

Description: The tiff streamer cannot save tiled indexed bitmap datas Read/Write callbacks are not always called in the Tiff streamer. Tiff streamer does not handle correctly border tiles.

Libraries: ilvtiff

Packages: foundation

PATCH 50.0012

Description: The Data Access application crashes at exit.

Libraries: dataaccess

Packages: dataaccess

PATCH 50.0013

Description: It is impossible to hide the scrollbars in an IliDbStringList.

Libraries: dbgadget

Packages: dataaccess

PATCH 50.0014

Description: [appframe] no pragma which force the library link on PC.

[appframe] Some .h files in the distrib cannot be parsed with the samples/appframe/synedit example.

[Appframe] The document save modifications dialog box is not triggered under UNIX under specific circumstances

Libraries: ilvappframe

Other files: samples/appframe/synedit/src/synparse.cpp, include/ilviews/appframe/macros.h, include/ilviews/appframe/manager/macros.h, include/ilviews/appframe/grapher/macros.h, include/ilviews/appframe/wizard/macros.h

Packages: appframe

PATCH 50.0015

Description: [studio] The registered include files and libraries are not always properly taken into account during code generation.

Libraries: ivstudio

Packages: foundation

PATCH 50.0016

Description: Studio.appli doesn't register the ilvproto dependancies. There are missing dependencies for prototype library

Libraries: ivstudio

Packages: foundation

PATCH 50.0017

Description: IlvOutlinePolygon border is badly drawn with a large thickness

Libraries: winviews, views

Packages: foundation

PATCH 50.0018

Description: IlvArc:: contains may return wrong results under extreme conditions

Libraries: display

Packages: foundation

PATCH 50.0019

Description: [manager] : cannot undo/redo IlvManagerMakeListLabelInteractor object creations

Libraries: ilvmgr, ilvgadmgr, ilvadvgadmgr

Packages: manager, gadgets

PATCH 50.0020

Description: The `IlvParser` class doesn't delete its variables.

Libraries: `ilvvar31`

Packages: compat

PATCH 50.0021

Description: The old charts code was not updated after the studio code generation was modified in Views5.0

Libraries: `views31, ilvstoldcharts31`

Packages: compat

PATCH 50.0022

Description: When Caps Lock is on on Windows, pressing a key + shift yields an event where `_modifiers` is `IlvShiftModifier` instead of 0

Libraries: `winviews`

Packages: foundation

PATCH 50.0023

Description: `IlIdbTreeGadget` is too slow when you have a lot of items

Libraries: `dbgadget`

Packages: `dataaccess`

PATCH 50.0024

Description: Studio crash at exit

Libraries: `ivstudio`

Packages: foundation

PATCH 50.0025

Description: Small defects with the dialog used to select the size of the printing in `ivstudio`.

Libraries: `ivstudio`

Packages: foundation

PATCH 50.0026

Description: [studio] The callbacks list in graphics inspector are not notified of the interactor changes.

Libraries: `ivstudio`

Packages: foundation

PATCH 50.0027

Description: [appframe] Closing one of the containers opened on the document will trigger the prompt for saving the document.

Libraries: ilvappframe

Packages: appframe

PATCH 50.0028

Description: zoomable label potentially corrupts the world transformation on NT platforms

Libraries: winviews

Packages: foundation

PATCH 50.0030

Description: Bad management of submenus with Windows Multiple Monitors feature

Libraries: ilvgadgt, ilvwlook, ilvw95look

Packages: foundation

PATCH 50.0031

Description: bad update of the attachments when a panel is resized at init time

[foundation] attached graphics may be badly resized when setting a guide limit.

Libraries: views

Packages: foundation

PATCH 50.0032

Description: Crash after embedding a menu in a graphic handle. A tear off popup menu closes automatically after selection

Libraries: ilvgadgt, ilvmgr

Packages: foundation, manager

PATCH 50.0033

Description: IFC: XML bad encoding check for UTF-16 without signature and Wrong endian UTF-16 without signature.

Libraries: ilog

Packages: foundation

PATCH 50.0034

Description: Palette clip conflict when previewing before printing.

Libraries: ilvprint

Packages: foundation

PATCH 50.0035

Description: [Studio][Protos] Invisible graphics of the proto are made visible on edition
[protos] prstudio crashes when saving an .ilv file that contains a prototype that was previously removed from its library

Libraries:

Packages: protos

PATCH 50.0036

Description: [prstudio] crash when removing the name of a protoinstance
[protos] cannot set a name to a protographic copy under ivfstudio

Libraries: ilvproto

Packages: protos

PATCH 50.0037

Description: [protos][studio] save proto library as crashes

Libraries: prstudio

Packages: protos

PATCH 50.0038

Description: [Protos] 3.1 to 4.0 incompatibility: inherited values are hardcoded in 4.0 proto's description.

Libraries: ilvproto

Packages: protos

PATCH 50.0039

Description: `IlvContainerGraphicHolder::setPropertyToGraphic` leads to a free memory read.

Libraries: views, ilvadvgdt, ilvmgr

Packages: foundation, gadgets, manager

PATCH 50.0040

Description: PrStudio: cannot select an attribute name in an attribute parameter field.

Libraries: prstudio

Packages: protos

PATCH 50.0041

Description: Cannot close the combo box menu using the Escape key.

Libraries: ilvgadgt

Packages: foundation

PATCH 50.0042

Description: A pair of notify/watch accessor might not work as expected if the attribute attached to the watch accessor is untyped.

Libraries: views

Packages: foundation

PATCH 50.0043

Description: [Studio]In some circumstance the apply button does not work fine.

Libraries: ivstudio

Packages: foundation

PATCH 50.0044

Description: [windows] IlvWindowsDevice printing is affected by small/large fonts display settings.

Libraries: winviews

Packages: foundation

PATCH 50.0045

Description: [printing] studio crashes when setting a dummy preview page.

[printing] missing localized printing.dbm file in the distribution.

Libraries: ilvprtdlg

Other files: data/res/printing.rc, data/printing/locale/fr_FR.windows-1252/printing.dbm, data/printing/locale/fr_FR.ISO-8859-1/printing.dbm

Packages: gadgets, foundation

PATCH 50.0046

Description: [appframe] Alt Keyboard accelerator key is mapped to the `IlvAltModifier` (should be `IlvMetaModifier`).

Libraries: ilvappframe

Packages: appframe

PATCH 50.0047

Description: On Windows, it is not possible to return to English locale if `ivfstudio` is started in Japanese or Chinese.

Libraries:

Other files: bin/res/i2dblock.rc, data/res/winviews.rc, data/iljscript/locale/fr_FR.windows-1252/gide.dbm, data/iljscript/locale/fr_FR.windows-1252/messages.js, studio/data/res/

foundation.rc, studio/data/res/script.rc, studio/msvc6/ivfstudio.exe, studio/msvc7/ivfstudio.exe

Packages: foundation

PATCH 50.0048

Description: On Windows, it is not possible to return to English locale if `ivfstudio` is started in Japanese or Chinese.

Libraries:

Other files: data/res/appframe.rc

Packages: appframe

PATCH 50.0049

Description: On Windows, it is not possible to return to English locale if `ivfstudio` is started in Japanese or Chinese.

Libraries:

Other files: studio/data/res/gadgets.rc

Packages: gadgets

PATCH 50.0050

Description: [Windows] The printing of opaque bitmaps is black.

Libraries: winviews

Packages: foundation

PATCH 50.0051

Description: Problem with same messages defined in several dbm files with different languages.

Libraries: display

Packages: foundation

PATCH 50.0052

Description: `IlvMatrix` does not show its tooltip after having shown an `IlvGraphicMatrixItem` tooltip.

Libraries: ilvadvgdt

Packages: gadgets

PATCH 50.0053

Description: Crash when trying to export a table schema from `ivfstudio`.

Libraries: dbstsql

Packages: dataaccess

PATCH 50.0054

Description: `IlvDisplay::colorTable` doesn't properly handle mutable colors.

Libraries: `display`

Packages: `foundation`

PATCH 50.0055

Description: Keyboard shortcuts are not invoked with minimized MDI views.

Libraries: `views, ilvgadmgr, ilvadvgdt`

Packages: `foundation, manager, gadgets`

PATCH 50.0056

Description: The `IlvDisplayTestApi` notification mechanisms works partially on Windows.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0058

Description: Tooltips might not work on a transient view with no border (on Windows).

Libraries: `winviews, views, ilvgadgt`

Packages: `foundation`

PATCH 50.0060

Description: `[studio][printing]` Japanese locale causes `ivfstudio` to crash at print preview.

Libraries: `ilvprint`

Packages: `foundation`

PATCH 50.0061

Description: The `IlvTableComboBox` does not support the multi-display.

Libraries: `dbgadget`

Packages: `dataaccess`

PATCH 50.0062

Description: `[Windows]` Labels are not displayed with correct font.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0063

Description: Bad management of keyboard events in `IlvViewFrame` since Patch 50.00055

Libraries: `ilvadvgdt`

Packages: gadgets

PATCH 50.0064

Description: Bad drawing of a notebook in Windows XP Look.

Libraries: ilvawxplook

Packages: gadgets

PATCH 50.0065

Description: ivfstudio may crash when creating and IlvFilteredGraphic on UNIX 8 bits display

Libraries: views

Packages: foundation

PATCH 50.0066

Description: [IFC-WINDOWS]Test of write access on pathname with a blank always returns IlFalse.

Libraries: ilog

Packages: foundation

PATCH 50.0067

Description: Several problems on Dockable Windows

Libraries: winviews, ilvadvgdt

Packages: foundation, gadgets

PATCH 50.0068

Description: Cannot trace the memory manager

Libraries: ilog

Packages: foundation

PATCH 50.0069

Description: IlvDisplay::putBitmapData may not work on Windows after some drawings have been made in the bitmap.

Libraries: winviews

Packages: foundation

PATCH 50.0070

Description: fr_FR.windows-1252/dvwizard.dbm file uses an incorrect encoding.

[appframe][dvwizard] The docking position of views is not taken into account.

[appframe] There are inconsistencies in the modality/transience of some dialog boxes.

Libraries: `ilvappframe`

Other files: `bin/data/appframe/dvwizard/locale/fr_FR.windows-1252/dvwizard.dbm`, `bin/data/appframe/dvwizard/locale/fr_FR.ISO-8859-1/dvwizard.dbm`

Packages: `appframe`

PATCH 50.0071

Description: Bitmap streamers are not correctly registered.

Libraries: `xviews`, `mviews`, `winviews`

Packages: `foundation`

PATCH 50.0072

Description: `IlvWindowsDevice::setOrientation()` has no effect, only the printer default configuration is used.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0073

Description: `[DvWizard][AppFrame]` Deleting the "RecentProjects" command crashes the wizard.

Libraries: `ilvappwizard`

Packages: `appframe`

PATCH 50.0074

Description: `IlvRGBBitmapData::alphaCompose` MMX code is not optimal.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0075

Description: `[Protos] IlvGroupInputFile` badly reads double quoted values when the decimal symbol is `'`.

Libraries: `ilvproto`

Packages: `protos`

PATCH 50.0076

Description: Bug in `IlvText::getSelectedText` in a multibyte environment.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0077

Description: The generated `Panel` subclass constructor code (`ivfstudio`) is incorrect.

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0078

Description: `IlvDisplay::colorTable` might be called on Windows (depth usually > 8) after a 4 or 8 bits deep bitmap has been read.

Libraries: `xviews, mviews, winviews`

Packages: `foundation`

PATCH 50.0079

Description: `IlvMoveInteractor` leaves a ghost upon click on a button different from `IlvLeftButton`.

Libraries: `views`

Packages: `foundation`

PATCH 50.0080

Description: [AppFrame] generated project application may crash on `IlvDvProjectDocument::activateItem`.

Libraries: `ilvappframe`

Packages: `appframe`

PATCH 50.0081

Description: The drawing of 1-bit deep transparent bitmaps is incorrect after patch 402065.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0082

Description: `IlvDisplay::colorTable` might be called on Windows (depth usually > 8) when saving a 4 or 8 bits deep bitmap.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0083

Description: Impossible to choose different initial docking configurations for each view of an appframe document.

Libraries: `ilvappframe`

Packages: `appframe`

PATCH 50.0084

Description: `IlvWritePBMBitmap` may try to access the `display colorTable` while in `TrueColors`.

Libraries: `winviews, mviews, xviews`

Packages: `foundation`

PATCH 50.0085

Description: Drawing a bitmap is drawn with a palette that has an alpha value causes the memory use to increase (dll).

Libraries: `winviews, ilvgdiplus`

Packages: `foundation`

PATCH 50.0086

Description: `IlvMarkingMenu` does not delete all the windows upon creation.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0087

Description: `IlXmlParser` does not parse correctly the `<!DOCTYPE ... >` tag

Libraries: `ilog`

Packages: `foundation`

PATCH 50.0088

Description: [studio] Two successive commas are generated in the 'Panel Subclass' constructor.

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0089

Description: [Event player] The player does not play correctly when we move the slider of the scrollbar.

Libraries: `xviews, winviews, mviews`

Packages: `foundation`

PATCH 50.0090

Description: `IlvSystemPort::GetBitmapData` may crash when dealing with a masked bitmap.

Libraries: `xviews, mviews, winviews`

Packages: `foundation`

PATCH 50.0091

Description: [AppFrame] Closing one of the two views associated to a document may not close the document.

Libraries: `ilvappframe`

Packages: `appframe`

PATCH 50.0092

Description: Cannot save custom events in the event player.

Libraries: `winviews, mviews, xviews`

Packages: `foundation`

PATCH 50.0093

Description: [Windows] `IlvZoomableTransparentIcon` cannot be rotated by 180 deg
`IlvZoomableIcon` can't be flipped.

`IlvTransformer::isScale` returns true for symmetries.

Libraries: `display`

Packages: `foundation`

PATCH 50.0094

Description: [appframe] The `ConfirmSave` dialog box is not transient wrt the main window.

Libraries: `ilvappframe`

Packages: `appframe`

PATCH 50.0095

Description: Bad redraw when zooming in an area with a scale using crossing values and chart cursor.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0096

Description: The dockable pane initiates a dragging operation on a `ButtonDown` event without checking which button is down.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0097

Description: When replacing the whole text in a matrix cell, the first character may not be visible.

Libraries: ilvgadgt

Packages: foundation

PATCH 50.0098

Description: [AppFrame] duplicate resource are generated when two actions share the same icon.

Libraries: ilvappframe

Packages: appframe

PATCH 50.0099

Description: [AppFrame] A crash may occur on UNIX when closing very fast frames from the 'More Windows' panel.

[AppFrame] Closing one of the two views associated to a document may not close the document.

Libraries: ilvappframe

Packages: appframe

PATCH 50.0100

Description: Deleting a menu item from the ivfstudio menu inspector turns the item into a separator.

Libraries: ilvstgadget

Packages: gadgets

PATCH 50.0101

Description: IliErrorMessage::getMessage() returns an empty string.

Libraries: dataaccess

Packages: dataaccess

PATCH 50.0102

Description: Values (2, 1) for the stepsCount/subStepsCount in the IlvSingleScaleDisplayer causes a crash.

Libraries: ilvcharts

Packages: charts

PATCH 50.0103

Description: DvWizard crashes when a new item is inserted in the menu bar of the generated application.

DvWizard : When the document (or view) class changes, the "derived from" field is reset to IlvDvDocument (or IlvDvTextView)

Libraries: `ilvappwizard`

Other files: `bin/data/appframe/dvwizard/dvwizard.odv`

Packages: `appframe`

PATCH 50.0104

Description: The code generation does not work for `IlvChartGraphic`.

Libraries: `ilvcharts, ilvgadgraph`

Packages: `charts, grapher`

PATCH 50.0105

Description: Z Order of overlapping sibling windows is not portable across platforms

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0106

Description: An `IlvChartGraphic` with an `IlvPieChartDisplayer` read from an ILV file might not be updated properly when a point is added to one of its dataset.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0107

Description: The header file of non `IlvGadgetContainer` base classes is not added to generated code.

Libraries: `views, ilvstappli`

Packages: `foundation, gadgets`

PATCH 50.0108

Description: [studio] [solaris] Delete key has no action when num lock is on.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0109

Description: [appframe] appframe prompts for document reloading everytime it is reactivated.

Libraries: `ilvappframe`

Packages: `appframe`

PATCH 50.0110

Description: `IlvCircularScale::draw` uses a clip based on `_drawrect` instead of the object's bounding box.

Libraries: views

Packages: foundation

PATCH 50.0111

Description: Studio doesn't generate the #include <ilviews/graphics/selector.h> line when an IlvSelector is used.

Libraries: views

Packages: foundation

PATCH 50.0112

Description: Call to varargs functions must have explicitly typed arguments (HP 64 bits).

Libraries: ilvappframe, ilvappwizard

Packages: appframe

PATCH 50.0113

Description: IlvTransformedGraphic::applyTransform doesn't perform well on every objects.

Libraries: views

Packages: foundation

PATCH 50.0114

Description: [gadgets] IlvMenuItem accelerators should ignore some modifiers (ex: numlock on solaris).

Libraries: ilvgadgt

Packages: foundation

PATCH 50.0115

Description: [Windows] IlvSystemPort::fillPolyline may raise an error when drawing only one point.

Libraries: winviews

Packages: foundation

PATCH 50.0116

Description: [Windows] it is not possible to print with the default printer without displaying the print Dialog.

Libraries: winviews

Packages: foundation

PATCH 50.0117

Description: [gadgets] `IlvIFileSelector` does not match the UNIX behavior regarding relative paths.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0118

Description: Problem with `IlvPrintableComposite`

Libraries: `ilvprint`

Packages: `foundation`

PATCH 50.0119

Description: Clicking on an `IlvSimpleToggle` makes the application crash.

Libraries: `dbgadget`

Packages: `dataaccess`

PATCH 50.0120

Description: [studio] It is not possible to specify a baseclass without class information (no header in the generated file).

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0121

Description: `IlvSwitchAccessor` uses "delete []" to free memory allocated with `new` or `malloc` (FMM).

Libraries: `ilvproto`

Packages: `protos`

PATCH 50.0122

Description: The "16 bits" clipping done by Views before calling X11 drawing primitive is not enough to prevent XServer drawing oddities

Libraries: `xviews, mviews`

Packages: `foundation`

PATCH 50.0123

Description: [gadgets] `IlvNumberField` may crash studio while reading back the min/max data (precision issue).

Libraries: `ilvgadgt`

Packages: `foundation`

PATCH 50.0124

Description: [charts] Removing an scale from an `IlvChartGraphic` causes a crash.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0125

Description: `IlvReliefGauge` doesn't register any "ClassCode" information.

Libraries: `views`

Packages: `foundation`

PATCH 50.0126

Description: `IlvStringList` scrollbars adjusting produces unmatched up and down scrolls.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0127

Description: Several sensitivity/focus problem on notebook and containers.

Libraries: `ilvgadmgr, ilvgadgt`

Packages: `manager, foundation`

PATCH 50.0128

Description: The "State" accessor in the "general" tab of the studio graphic inspector doesn't work properly.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0129

Description: The generated code for Chart can crash when the format is static.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0130

Description: The include for `IlvChartLegend` is not generated by studio.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0131

Description: When a legend connected to a chart is removed from a studio buffer, the chart keeps referring to the legend.

Libraries: `ilvstcharts`

Packages: `charts`

PATCH 50.0132

Description: `IlvSpinBox::setValue` does return `IlFalse` on success since patch 40.2020 (BR 2001.189).

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0133

Description: The contents of the manager may be printed on the footer and header.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0134

Description: Moving up and down datasets in chart inspector causes studio to crash.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0135

Description: The Studio `IlvToggleFilteredGraphicCommand` does not consider an `IlvGrapher` buffer.

Libraries: `ilvstgrapher`

Packages: `grapher`

PATCH 50.0136

Description: Studio messages editor crashes (`IlvMessagePanel` bug).

Libraries: `ilvedit`

Packages: `gadgets`

PATCH 50.0137

Description: [studio] Remove data from the `dataSet` chart inspector does not refresh the last removed row.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0138

Description: [studio] inspector crashes after having deleted a composite displayer.

Libraries: `ilvstcharts`

Packages: charts

PATCH 50.0139

Description: `IlvChartScrollInteractor` can get stuck when reaching the maximum and minimum values.

Libraries: `ilvcharts`

Packages: charts

PATCH 50.0140

Description: After using `IlvSingleScaleDisplayer::setStepLabels()`, cannot come back to fixed steps.

Libraries: `ilvstcharts`

Packages: charts

PATCH 50.0141

Description: `IlvGadgetItem` does not display strings correctly in a multibyte locale.

Libraries: `winviews, ilvgadgt`

Packages: foundation

PATCH 50.0142

Description: Tooltips are not displayed on Windows in popup menus since patches 40.2114 and 50.0058.

Libraries: `winviews`

Packages: foundation

PATCH 50.0143

Description: Studio should not allow to delete a panel class being used in an application notebook.

Libraries: `ilvstappli, ivstudio`

Packages: `gadgets, foundation`

PATCH 50.0144

Description: Wrong transparency computation on 16 bits displays.

Libraries: `xviews, mviews`

Packages: foundation

PATCH 50.0145

Description: Crash in studio when adding a displayer to a chart with no displayers.

Libraries: `ilvstcharts`

Packages: charts

PATCH 50.0146

Description: [pie] reading back a chart does not restore the pie slice labels font.

Libraries: ilvcharts

Packages: charts

PATCH 50.0147

Description: bad redraw when zooming in an area with a scale using crossing values and chart cursor.

Libraries: ilvcharts

Packages: charts

PATCH 50.0148

Description: (Unix) Paste error with `getClipboard()` through Exceed.

Libraries: xviews, mviews

Packages: foundation

PATCH 50.0150

Description: Grouping objects in a `IlvSmarSet` corrupts the focus chain.

Libraries: views

Packages: foundation

PATCH 50.0151

Description: [studio] `IlvStringList` selection mode inspector does not work correctly since patch 50.0026.

Libraries: ilvadvgdt, ilvstgadget

Packages: gadgets

PATCH 50.0152

Description: Visual Studio wizard crashes when creating a project with an `IlvGrapher`.

Libraries:

Other files: `tools/viewswiz50/viewswiz50.awx`, `tools/viewswiz50/viewswiz50.hlp`

Packages: foundation

PATCH 50.0153

Description: Unsatisfied symbols from `libilvmgr` in `libiljsgide`.

Libraries: iljsgide

Packages: foundation

PATCH 50.0154

Description: Matrix in Motif look and feel pastes twice at `IlvButtonUp` of right button.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0155

Description: The sensitivity of gadgets added to `IlvGadgetMatrixItems` is not persistent.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0156

Description: Using tooltips on `gadgetItems` with Motif may lead to a crash.

Libraries: `views`

Packages: `foundation`

PATCH 50.0157

Description: `[AppFrame] [windows] classinfo.odv` is missing in the `appframe.rc` resource file.

Libraries:

Other files: `data/res/appframe.rc`

Packages: `appframe`

PATCH 50.0158

Description: `IlvModeNotOr` and `IlvModeNotAnd` use incorrect logical functions of the GC (X11).

Libraries: `xviews, mviews`

Packages: `foundation`

PATCH 50.0159

Description: the `tm_isdst` field isn't initialized by the `JvConverter`.

Libraries: `ilvjs`

Packages: `foundation`

PATCH 50.0160

Description: `[gadgets] [foundation] IlvMatrix` crashes when deselecting a `5000 * 8` table.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0161

Description: [variable] Bad behavior of the parser when the decimal symbol is ',' (comma).

Libraries: `ilvvar31`

Packages: `compat`

PATCH 50.0162

Description: The `IlvMakePolylineLinkInteractor` hangs when one double-clicks outside a node.

Libraries: `ilvgrapher`

Packages: `grapher`

PATCH 50.0163

Description: `IlvManager::allIntersects` only takes into account the visible layers.

Libraries: `ilvmgr`

Packages: `manager`

PATCH 50.0164

Description: [`prstudio`] `IlvAccessorParameter::getChoices()` receives an (inconsistent) null `IlvValueTypeClass` object.

Libraries: `prstudio`

Packages: `protos`

PATCH 50.0165

Description: Crash reading prototypes containing prototypes in a multidisplay environment.

Libraries: `ilvproto`

Packages: `protos`

PATCH 50.0166

Description: [`matrix`] Crash when selecting all rows of a 5000 * 8 table (bottom-up selection).

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0168

Description: `IlvChartDragPointInteractor` does not always take the validation constraint into account.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0169

Description: An additional " appears when the prototype is saved in Views 5.0.

Libraries: ilvproto

Packages: protos

PATCH 50.0170

Description: Prototypes may not be able to retrieve properly their holder since patch 401118.

Libraries: prstudio

Packages: protos

PATCH 50.0171

Description: A prototype edition buffer is not marked as modified when the values of the prototype are modified.

Libraries: prstudio

Packages: protos

PATCH 50.0172

Description: [gadgets] Wrong gadget container background color in motif L&F.

Libraries: views

Packages: foundation

PATCH 50.0173

Description: Portage on HP 64 bits

Libraries: dbgadget, dbaccess

Packages: dataaccess

PATCH 50.0174

Description: [printing] IlvPrintableGraphic does not print anything (bad transformer setting).

Libraries: ilvprint

Packages: foundation

PATCH 50.0175

Description: [studio] Application panel inspector may not be refreshed properly and may lead to a crash.

Libraries: ilvstappli

Packages: gadgets

PATCH 50.0176

Description: Guides/Splitters limits in `IlvGanttChartForm` do not depend on L&F.

Libraries: `ilvgantt`

Packages: `gantt`

PATCH 50.0177

Description: [protos] FMM in `IlvGroupMediator::undoSubscription`.

Libraries: `ilvproto`

Packages: `protos`

PATCH 50.0178

Description: Changing the values of a prototype that contains an `IlvPrototypeAccessor` might mess up the `IlvGroupInspector`.

Libraries: `prstudio`

Packages: `protos`

PATCH 50.0179

Description: In some circumstances, Studio can crash when you add or remove a class from the application buffer.

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0180

Description: [Sutdio] When a panel instance is reset in the application buffer, possible subpanels are not taken into account.

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0181

Description: Using a displayer with child displayers, clicking its representation in the "Data sets" tab makes studio crash.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0182

Description: New Feature: Disable the Marking Menu in Studio.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0183

Description: `IlvAbstractMatrix::scrollTo` may not work as expected if the matrix has fixed rows.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0184

Description: `IlvChartGraphic::removeOrdinateScales` doesn't empty the `IlvAxisElement` array.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0185

Description: [ps print] wrong scaling factor for Japanese.

Libraries: `xviews, mviews, winviews`

Packages: `foundation`

PATCH 50.0186

Description: `IlvSingleScaleDisplayer::getCursorByName` is not protected against unnamed cursors.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0187

Description: Possible crash in Windows XP look & feel.

Libraries: `ilvwxplook, ilvawxplook`

Packages: `foundation, gadgets`

PATCH 50.0188

Description: FMR : an `IlvCoordinateInfo` that no longer exists is used during the `IlvChartGraphic` deletion.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0189

Description: The data associated with the `_ilvSelected` symbol set on a chart graphic by the `IlvChartSelectInteractor` may be invalid.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0190

Description: [Cursor] Label may not appear under some circumstances after patches 500.095 and 147.

Libraries: `ilvcharts`

Packages: `charts`

PATCH 50.0191

Description: `IlvFileBrowser` should prompt a message if saving on an existing file.

Libraries: `ilvadvgdt`

Packages: `gadgets`

PATCH 50.0192

Description: `IlvGadget::computePalettes` changes the `IlvPalette` instance if antialiasing is not `IlvNoAntialiasingMode`.

[gadgets] It is no longer possible to change the `gadgetdefault` colors using resources.

Libraries: `views,winviews`

Packages: `foundation`

PATCH 50.0193

Description: In some circumstances, Studio can generate an empty `#include` for an unknown container class.

Libraries: `ilvstappli`

Packages: `gadgets`

PATCH 50.0194

Description: `IlvSimpleToggle` edition does not work fine in the first column of a table gadget.

Libraries: `dbgadget`

Packages: `dataaccess`

PATCH 50.0195

Description: `IlvPrinterPreviewPort` crashes drawing clipped transformed strings.

Libraries: `ilvprint`

Packages: `foundation`

PATCH 50.0196

Description: [EventPlayer] Popup menus are not getting pointer moved events inside a modal window.

Libraries: `winviews`

Packages: foundation

PATCH 50.0197

Description: `IliFormat` rounds a 5 in the decimal part as +0, not as +1.

Libraries: dataaccess

Packages: dataaccess

PATCH 50.0198

Description: `IlvPort::drawLabel` with `IlvCenter` horizontal alignment might shift 1 pixel to the left.

Libraries: winviews

Packages: foundation

PATCH 50.0199

Description: [Proto] Studio Inspector: need to validate on exit cell attribute, not just when hitting Return.

Libraries: prstudio

Packages: protos

PATCH 50.0200

Description: Resized `IlvZoomableLabels` do not appear in the preview.

Libraries: ilvprint

Packages: foundation

PATCH 50.0201

Description: `IlvStereographicProjection` and `IlvTransverseMercatorProjection` are incorrectly serialized.

Libraries: ilvmaps

Packages: maps

PATCH 50.0202

Description: Tear-off menu doesn't get rid of the possible mnemonic in its title.

Libraries: ilvgadgt

Packages: foundation

PATCH 50.0203

Description: [Cursor] Cursor is clipped to the data area since latest patches.

Libraries: ilvcharts

Packages: charts

PATCH 50.0204

Description: [printing] Postscript page setup issue with color selector.

Libraries: `ilvprtdlg`

Packages: `gadgets`

PATCH 50.0205

Description: [printing] Wrong clipping when printing a manager view in keep-ratio mode (default).

[printing] `IlvRectangularScale` does not print correctly.

Libraries: `ilvprint, ilvmgrprint`

Packages: `foundation, manager`

PATCH 50.0206

Description: [printing] Postscript options do not affect the preview and final ps file.

Libraries: `ilvprtdlg`

Packages: `gadgets`

PATCH 50.0207

Description: [printing] `IlvRectangularScale` does not printed correctly.

Libraries: `display, ilvprint`

Packages: `foundation`

PATCH 50.0208

Description: Views does not handle Unicode clipboard strings correctly.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0209

Description: [Protos] CTRL+M inspector shortcut on Solaris causes problems with the Enter numpad key (numlock off).

Libraries:

Other files: `studio/data/ivstudio/protos/interface.ilv`

Packages: `protos`

PATCH 50.0210

Description: [Printing] Preview is not updated when changing the page orientation.

[printing] Postscript options do not affect the preview and final ps file.

Libraries: `ilvprtdlg`

Packages: gadgets

PATCH 50.0211

Description: `IlvSystemPort::GetBitmapData` does bad if rect not at 0, 0.

Libraries: winviews

Packages: foundation

PATCH 50.0212

Description: [Printing] preview scrollbars do not support panel resizing.

Libraries: `ilvprtdlg`

Packages: gadgets

PATCH 50.0213

Description: Removing a data point may cause a crash at
`IlvChartGraphic::dataPointsRemoved`.

Libraries: `ilvcharts`

Packages: charts

PATCH 50.0214

Description: Using a scale with number of steps == 1 may lead to a crash.

Libraries: `ivstudio`

Packages: foundation

PATCH 50.0215

Description: [Pie chart] Floating point exception with a unique value equals to zero.

Libraries: `ilvcharts`

Packages: charts

PATCH 50.0216

Description: `IlvMatrix` (with fixed rows)/`IlvSheet` does not scrolls to the first scrollable row with `PageUp`.

Libraries: `ilvadvgdt`

Packages: gadgets

PATCH 50.0217

Description: The two accelerators based on the F6 key and that allow to navigate through a set of `IlvViewFrame` are swapped.

Libraries: `ilvadvgdt`

Packages: gadgets

PATCH 50.0218

Description: Printing an `IlvGanttChart` to a printer produces an unclipped output.

Libraries: `ilvgantt`

Packages: `gantt`

PATCH 50.0219

Description: `IlvDbNavigator`: The `setSensitive(11True)` method does not work for user buttons.

Libraries: `dbgadget`

Packages: `dataaccess`

PATCH 50.0220

Description: `IlvManager::allContains` doesn't check the visibility of the objects stored in the highest layer.

Libraries: `ilvmgr`

Packages: `manager`

PATCH 50.0221

Description: Crash in studio when modifying a scale property and adding a new scale before applying it.

Libraries: `ilvstcharts`

Packages: `charts`

PATCH 50.0222

Description: `IlvMapCompass::computeNorths()` does not check that the view transformer is null.

Libraries: `ilvmaps`

Packages: `maps`

PATCH 50.0223

Description: `IlvMapTileLoader` ignore all features of tiles whose first featured is not be ignored.

Libraries: `ilvmaps`

Packages: `maps`

PATCH 50.0224

Description: On Windows, points coordinates of polylines and polygons are still clipped to `[SHRT_MIN/2, SHRT_MAX/2]`.

Libraries: `winviews`

Packages: foundation

PATCH 50.0225

Description: [Windows]ZoomableLabels: very different fonts after a rotation.

Libraries: winviews

Packages: foundation

PATCH 50.0226

Description: IlvPrinterPreviewDialog::initData doesn't look for printing.dbm in the resource file.

Libraries: ilvprtdlg, ivstudio

Other files: studio/data/res/ivfstudio.rc, studio/<pf>/ivfstudio<exeExt>

Packages: gadgets, foundation

PATCH 50.0227

Description: IlvPSColorDevice doesn't transform correctly colors into shades of gray.

Libraries: display

Packages: foundation

PATCH 50.0228

Description: On Windows, IlvDisplay::getClipboard doesn't lock the pool of char allocated to store the data.

Libraries: ilvatext, ilvadvgdt, ilvmgr

Packages: gadgets, manager

PATCH 50.0229

Description: Printed out strings may appear slightly truncated.

Libraries: winviews

Packages: foundation

PATCH 50.0230

Description: [Views 5.0] IlvZoomInteractor does not take the into account the default cursor given in the constructor.

Libraries: ilvmgr

Packages: manager

PATCH 50.0231

Description: [AnnoText] Memory leak seen in the IlvATHtmlReader.

Libraries: ilvatext

Packages: gadgets

PATCH 50.0232

Description: `IlvDvDocument::revert` checks `IlvDvMessageDialog::popup()` result incorrectly.

Libraries: `ilvappframe`, `ilvappmgr`

Packages: `appframe`

PATCH 50.0233

Description: [X11]Memory leaks in X11 initialization.

Libraries: `xviews`, `mviews`

Packages: `foundation`

PATCH 50.0234

Description: [X11]Patch 50.0233 may cause a crash when the locale is not C.

Libraries: `xviews`, `mviews`

Packages: `foundation`

PATCH 50.0235

Description: [Windows] The Printer property dialog is not transient in `ivfstudio`.

Libraries: `ivstudio`

Packages: `foundation`

PATCH 50.0236

Description: Bad performance when doing bulk `appendRow/deleteRow` updated connected to an `IliChartGraphic` or to a gadget with several data sources.

Libraries: `dataaccess`, `dbgadget`

Packages: `dataaccess`

PATCH 50.0237

Description: `Ivstudio` may crash when a prototype instance is saved as an ActiveX.

Libraries: `views`, `ilvstdynact`

Packages: `foundation`

PATCH 50.0238

Description: `IlvView` objects do not receive focus in/out events with Motif libraries.

Libraries: `mviews`

Packages: `foundation`

PATCH 50.0239

Description: [Protos][Regression] Studio crashes when deleting a prototype component from the Group Inspector panel.

Libraries: prstudio

Packages: protos

PATCH 50.0241

Description: Scrolling an IlvSheet by clicking in the scrollable area of the scrollbar misses a row.

Libraries: ilvadvgdt

Packages: gadgets

PATCH 50.0242

Description: Crash deleting the container from the "focus in" callback of a button.

Libraries: ilvgadgt

Packages: foundation

PATCH 50.0243

Description: The event player cannot replay events in subwindows of modal views.

Libraries: xviews, mviews

Packages: foundation

PATCH 50.0244

Description: Round rectangle right and lower edges are not printed in preview.

Libraries: display

Packages: foundation

PATCH 50.0245

Description: [Studio] Layer names start with "Layer 1", but layer indexes in "Draw -> Layer" start at 0.

Libraries: ivstudio

Packages: foundation

PATCH 50.0246

Description: SDO Object model access to database do not release IldRequest objects properly.

Libraries: ilvdbmaps

Packages: maps

PATCH 50.0247

Description: Popup menu timer for hiding child popups fails if child popup has a child itself.

Libraries: `ilvgadgt`

Packages: `foundation`

PATCH 50.0248

Description: [Gantt] [`IlvRectangularScale`] Scale ticks and grid do not match exactly.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0249

Description: [Windows] Wrong font size since patch50.0225.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0250

Description: [Windows] `IlvZoomableIcon` are not always printed correctly.

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0252

Description: Popup menu timer for hiding child popups fails if child popup has a child itself.

Libraries: `ilvgadgt`

Packages: `foundation`

PATCH 50.0253

Description: `IlvWindowsDevice::drawBitmap(pal, src, rect, point)` is incorrect if the rectangle origin is not (0, 0).

Libraries: `winviews`

Packages: `foundation`

PATCH 50.0254

Description: [X1] On the Sun French/Spanish keyboards, Circumflex and Diaresis are not handled in `IlvTextField`.

Libraries: `xviews, mviews`

Packages: `foundation`

Release Notes for Version 5.0

This chapter describes the changes that have been made to ILOG Views since version 4. You will find information on the following topics:

- ◆ *New Features*
- ◆ *Code Changes*

New Features

The new features of ILOG Views 5.0 are described in:

- ◆ *Foundation Features*
- ◆ *Studio Features*
- ◆ *Gadgets Features*
- ◆ *Application Framework Features*
- ◆ *Manager Features*
- ◆ *Data Access Features*
- ◆ *Charts Features*
- ◆ *Gantt Features*

◆ *Maps Features*

Foundation Features

The following new features have been added for ILOG Views 5.0:

Filters

◆ ILOG Views Foundation now has image processing classes providing the same functionality as the SVG filters:

- `IlvBlendFilter`
- `IlvColorMatrixFilter`
- `IlvSaturationFilter`
- `IlvLuminanceToAlphaFilter`
- `IlvHueRotateFilter`
- `IlvComponentTransferFilter`
- `IlvComposeFilter`
- `IlvConvolutionFilter`
- `IlvDisplaceFilter`
- `IlvFloodFilter`
- `IlvGaussianBlurFilter`
- `IlvImageFilter`
- `IlvLightingFilter`
- `IlvDiffuseLightingFilter`
- `IlvSpecularLightingFilter`
- `IlvMergeFilter`
- `IlvMorphologyFilter`
- `IlvOffsetFilter`
- `IlvTileFilter`
- `IlvTurbulenceFilter`
- `IlvFilterFlow`

and supporting classes:

- `IlvTransferFunction`
- `IlvBitmapDataKernel`
- `IlvLightSource`
- `IlvDistantLight`

- `IlvPointLight`
- `IlvSpotLight`
- `IlvPerlinNoise`
- `IlvIdentityTransfer`
- `IlvLinearTransfer`
- `IlvTableTransfer`
- `IlvDiscreteTransfer`
- `IlvGammaTransfer`
- `IlvIdentityTransfer`

These filters can be described in an XML format similar to the SVG filters format. They are applicable on `IlvRGBBitmapData` images. They can be chained together to create complex image processing commands.

- ◆ A graphic object `IlvFilteredGraphic` now offers the ability to apply filters (a flow of image processing operations) on any `IlvGraphic`.

Printing

- ◆ ILOG Views Foundation now has a printing framework to facilitate the printing in ILOG Views applications. It consists of the following classes:
 - `IlvPrintableDocument` to define a document
 - `IlvPrintable` to describe printable objects, with subclasses:
 - `IlvPrintableContainer`
 - `IlvPrintableText`
 - `IlvPrintableFormattedText`
 - `IlvPrintableGraphic`
 - `IlvPrintableFrame`
 - `IlvPrintableManager`, `IlvPrintableMgrView`, and `IlvPrintableManagerLayer` (available only with the manager package)
 - `IlvPrintableComposite`
 - `IlvPrintableLayout` for describing page layouts, with the predefined layouts:
 - `IlvPrintableLayoutOnePage`
 - `IlvPrintableLayoutMultiplePages`
 - `IlvPrintableLayoutIdentity`
 - `IlvPrintableLayoutFixedSize`

- `IlvPrinter` to describe the printer, with subclasses:
 - `IlvPSPrinter`
 - `IlvWindowsPrinter`
- `IlvPrintUnit` with predefined units:
 - `IlvPrintPointUnit`
 - `IlvPrintCMUnit`
 - `IlvPrintInchUnit`
 - `IlvPrintPicaUnit`
- `IlvPaperFormat` with a selection of preregistered paper formats
- Predefined user interface dialogs `IlvPostScriptPrinterDialog` and `IlvPrinterPreviewDialog` for choosing printers and their features. A print preview dialog is also available, all of these in the Gadgets package.
- ◆ There are two new classes for low-level Windows printing management:
 - `IlvWindowsPrinterDCFactory`
 - `IlvWindowsPrinterDCDialogFactory`

Bitmap Data

- ◆ There is a new method to draw `IlvBitmapData` using alpha per pixel `IlvPort::stretchBitmapData`.
- ◆ A new bitmap streamer for TIFF images has been added, `IlvTIFFStreamer`
- ◆ `IlvRGBBitmapData` now allows filtered image resampling using a large variety of filters for very high quality stretching. The new method is `IlvRGBBitmapData::stretchSmooth`.
`IlvRGBBitmapData` data can be made alpha-premultiplied.
- ◆ A new class for handling colormaps within `IlvIndexedBitmapData` has been added, `IlvColorMap`.

Quantizers

There are new Quantizers for 24 bits, and indexed color conversion has been added:

- ◆ `IlvFixedQuantizer` for conversion to a fixed colormap.
- ◆ `IlvNetscapeQuantizer` for conversion to the Netscape colormap.

The new hierarchy for quantizers is now:

- ◆ `IlvQuantizer`

- ◆ `IlvFixedQuantizer`
- ◆ `IlvQuickQuantizer`
- ◆ `IlvNetscapeQuantizer`
- ◆ `IlvWUQuantizer`
- ◆ `PostScript` Devices

The `PostScript` device can now make use of `PostScript` level 2 features (this is now the default mode).

The `PostScript` device when in level 2 can now encode images in various formats using encoders derived from `IlvPostScriptEncoder`. Three encoders are provided:

- ◆ `IlvASCIHexEncoder` (converts input bytes in hexadecimal, produces 2 characters from 1 input byte).
- ◆ `IlvASCII85Encoder` (convert input bytes to visible charset, produces 5 characters from 4 input bytes).
- ◆ `IlvRunLengthEncoder` (converts input bytes to binary run length encoded data; compression depends on input).

The default encoder is now `IlvASCIHexEncoder` for level 1 and `IlvASCII85Encoder` for level 2. These encoders can be linked together, for example, to `ascii85` encode run length encoded data.

Windows Transparency

On Windows platforms 98, 2000, and XP, `IlvView` can be partially transparent when it is a top window, and full transparency can be defined by a color value. New Windows functionality such as Layered Windows can be used. The new methods are:

- ◆ `IlvAbstractView::setOpacity`
- ◆ `IlvAbstractView::getOpacity`
- ◆ `IlvAbstractView::setTransparentColorKey`
- ◆ `IlvAbstractView::getTransparentColorKey`
- ◆ `IlvAbstractView::setLayered`

These methods have no effect on other platforms.

Graphic Rendering

The ILOG Views low-level drawing primitives API has been enhanced to support transparency and anti-aliasing. These features are accessible from different levels: at the port (`IlvPort`) level for a global setting, or at the palette (`IlvPalette`) level for a local setting. See the sections *Alpha Value* and *Anti-AliasingMode* of the Foundation User Manual's chapter "*IlvResource: The Graphic Resources Class*" for details.

Note that these features are available only on Windows platforms with GDI+ installed. See the section *Using GDI+ Features with ILOG Views* in Appendix B of the *Foundation User's Manual* for details.

Studio Features

ILOG Studio now integrates a new printing package that replaces the mechanism previously used.

Gadgets Features

Look and Feel Management

- ◆ The look and feel of Windows XP is now supported on platforms running Windows XP.
- ◆ You can specify the look and feel at different levels: `IlvGadget`, `IlvGadgetContainer`, and `IlvDisplay`. This makes it possible to mix several look and feels in the same application. See the section "*Gadgets Look and Feels*" of the *Gadgets User Manual* for details.
- ◆ It is now possible to create your own look and feel handler. See the section "*Gadgets Look and Feels*" of the *Gadgets User Manual* for details.
- ◆ Existing Look and Feels (Motif, Windows 3.11, Windows95, and Windows XP) have been put in separate libraries. You may have to modify your makefiles in order to link your applications. See the *Code Changes* section *Look and Feel Management* for details.

IlvViewFrame

The look of the `IlvViewFrame` objects has changed for Motif to look like a Motif component.

Docking Panes

The look of the docking handles has changed. Now, a docking handle displays the title of its related pane. However, you can keep the old look by using the static function method `IlvDockingHandlePane::UseDefaultHandlePanes`.

IlvComboBox and IlvScrolledComboBox

When the list of an `IlvComboBox` is opened, the `OpenList` callback is called. See the `IlvComboBox::OpenListSymbol` function for details.

When the list of an `IlvComboBox` is opened, the keyboard focus is still located on the text field, making it possible to enter characters while the list is shown. The selection of the list is then changed accordingly to what is located in the text field.

IlvMatrix

It is now possible to edit a matrix item with any `IlvGraphic` instance. See the class `IlvMatrixItemEditor` for details.

Application Framework Features

The Application Framework Editor has a new Palette entry, 'Dialogs,' to add dialog boxes and windows to your application.

For full details on the Editor see the chapter "Using the Application Framework Editor" in the *ILOG Views Application Framework User's Manual*.

Manager Features

Manager Layers

It is now possible to modify the rendering of a manager layer by specifying an alpha value and an anti-aliasing mode.

The alpha value controls the transparency of the layer, making it possible to see objects through layers drawn below this layer. See the `IlvManagerLayer::setAlpha` member function for details.

The `antialiasing` mode sets the anti-aliasing mode of the whole layer, a more convenient way than setting the anti-aliasing mode of each object of the layer. See the `IlvManagerLayer::setAntialiasingMode` method for details.

See the *Manager Layers* section in the *Manager User's Manual (2D Graphics / Basic Manager Features)* for more details.

Data Access Features

The following new features have been added for ILOG Views 5.0:

- ◆ There is a new database access: DB2.
- ◆ Dbschema is integrated into the SQL Tables palette of DbStudio or Data Access SQL plugin.
- ◆ The multidb format for DbStudio is replaced by the Data Access plugins and `ivfstudio`.

Charts Features

IlvBarChartDisplayer, IlvHiLoChartDisplayer

You can now set the width of the bars to be proportional to the whole width of the chart:

- ◆ `IlvBarChartDisplayer::setWidthPercent`
- ◆ `IlvHiLoChartDisplayer::setWidthPercent`

IlvChartCyclicPointSet

There is a new cyclic data set class, `IlvChartCyclicPointSet`.

IlvChartGradientPointInfo

There is a new class to define color gradients, `IlvChartGradientPointInfo`.

IlvXMLChartData

There is a new class to read data sets from an XML file, `IlvXMLChartData`.

Gantt Features

Following is a summary of the new features for ILOG Views Gantt in version 5.0:

- ◆ There is support for time scales in `IlvGanttChartForm`. You can use the time scales provided by the Foundation module in `IlvGanttChartForm`. A dynamic calendar grid, `IlvGanttCalendarGrid`, is also provided. See the sample `<ILVHOME>/samples/gantt/calendar` for details.
- ◆ New grid family classes have been added to the Gantt chart.
- ◆ The look of the grids displayed in the grapher views can be customized by specifying an `IlvPalette`.
- ◆ The grapher views have thin borders.
- ◆ You can enable tooltips on Gantt nodes.
- ◆ `IlvGanttSelectInteractor` allows you select and move not only Gantt nodes but also Gantt lines.
- ◆ The handle between grapher views has been changed from an `IlvFilledRectangle` to an `IlvReliefDiamond` in order to get a better look and to better use the space between grapher views.
- ◆ A new callback “Work Area” is added to `IlvGanttChart` to notify the work area changes.
- ◆ New samples have been added. Existing samples have been considerably revised.
- ◆ The ILOG Views Gantt Users’ Manual has been extensively rewritten.

Maps Features

This section describes the main changes that have been made to ILOG Views Maps since version 4.

See also the *ILOG Views Maps Classes* code changes.

Load-On-Demand Framework

The following features are added:

- ◆ A new class has been added to simplify the creation of tile loaders: the `IlvMapTileLoader` class. This class includes all standard rendering features and tile loading for all tile loaders.
- ◆ `IlvLookAheadFeatureIterator`: Defines the interface for `IlvMapFeatureIterator` that has the ability to fetch the ID of the next feature before reading it, allowing you to skip the next feature if it is not needed.
- ◆ Load-On-Demand for Shapefiles: Support for load-on-demand on ESRI Shapefiles has been added. To load Shapefiles on demand, a new type of file, with the `.idx` extension, has been introduced. These files contain the spatial indexes associated with Shapefiles.

The following classes have been added to support the load-on-demand feature:

- `IlvShapeFileIndex`: To read the newly introduced ShapeFile index files (`.shx` extension)
- `IlvShapeSpatialIndex`: To read the newly introduced spatial index files (`.idx` extension).
- `IlvShapeFileTileLoader`: The tile loader for Shapefiles, to create load-on-demand layers when used in conjunction with `IlvTiledLayer`.
- `IlvShapeFileLayer`: A tiled Shapefile layer that can be saved in an `.ilv` file.
- The `IlvShapeFileTiler` class has been added to generate the spatial index files.

New Supported Formats

Support for loading single GeoTIFF files or tiled GeoTIFF files has been added.

The following classes have been added to support the GeoTIFF format:

- ◆ `IlvGeoTIFFReader`: Reader for GeoTIFF files.
- ◆ `IlvGeoTIFFTileLoader`: Tile loader for loading tiled GeoTIFF files.
- ◆ `IlvGeoTIFFLayer`: A tiled GeoTIFF layer that can be saved in an `.ilv` file.
- ◆ `IlvGeoTIFFTiler`: A class to produce tiled GeoTIFF file.

The ability to read image files has been added. The image formats supported are those supported by ILOG Views.

- ◆ `IlvImageReader`: A class to read single image file.
- ◆ `IlvImageTileLoader`: A class to read a set of images, each image representing a tile in a tiled data set.

- ◆ `IlvImageLayer`: A tiled image layer that can be saved in an `.ilv` file.

File Name Resolution

A file name resolver mechanism has been added. This mechanism is used by the tile loaders to resolve pathnames.

The following classes support the file name resolver mechanism:

- ◆ `IlvMapDataPathManager`: A class to manage path resolvers.
- ◆ `IlvDefaultDataPathResolver`: A default implementation of an `IlvMapDataPathResolver` which looks for files in a directory.
- ◆ `IlvMapDataPathResolver`: The abstract base class for all path resolvers.

Oracle Spatial

- ◆ `IlvObjectSDOWriter::setCheckingStringAttributes` enables/disables the checking of String attributes.
- ◆ `IlvDefaultObjectSDOTileLoader::setRequestParameters` sets some parameters in order to tune the request that is used by an `IlvTile`.
- ◆ `IlvObjectSDOUtil::GetLayerExtent` computes the extent (the global bounding box of all geometries) of an SDO layer.

Samples

- ◆ A new sample to show how to read and tile ShapeFile files has been added.
- ◆ A new sample to show how to read and tile GeoTIFF files has been added.
- ◆ A new sample to show how to read multiresolution tiled data set (Shapefile and image) has been added.
- ◆ The shape sample can now tile a Shapefile for load-on-demand.

MapBuilder

The following new features are added:

- ◆ The MapBuilder is now able to read multiresolution data found in the data CD.
- ◆ An Overview has been added.
- ◆ The new legend enables the dragging/dropping of layers to change their order of appearance.
- ◆ The new menu active on the legend allows you to dynamically change the rendering palette of each layer.
- ◆ It now supports GeoTIFF and Shapefile load-on-demand.

Code Changes

This section presents changes in the code of existing ILOG Views and ILOG Script for ILOG Views classes since version 4.

- ◆ *ILOG Views Foundation Classes*
- ◆ *ILOG Views Charts Classes*
- ◆ *ILOG Views Gadgets Classes*
- ◆ *ILOG Views Gantt Chart Classes*
- ◆ *ILOG Views Maps Classes*

ILOG Views Foundation Classes

ILOG Views Foundation Classes include the following code changes.

IlvColorMap

- ◆ `IlvIndexedBitmapData` now uses `IlvColorMap`
- ◆ The quantizers have been modularized and use `IlvColorMap`.

IlvDisplay

The method `IlvDisplay::getBitmap` now has a second parameter. The prototype becomes:

```
IlvBitmap* getBitmap(const char* name, IlvBoolean read = IlvFalse) const;
```

When set to `IlvTrue`, the `read` parameter indicates that if the bitmap has not been found in the internal display cache list, it must be read using the `IlvDisplay::readBitmap` method.

IlvPort

On Windows platforms, the `IlvPort::drawTransformedString` method has changed its behavior to work around a display bug. This may result in smaller strings being displayed. As a side effect, the `IlvZoomableLabel` objects, which use this method, may have their drawing changed the same way.

IlvBitmap

Since Views 5.0, on the Windows platform when the display depth is > 8 , the `IlvBitmap` constructor that accepts an `IlvBitmapData` internally uses a `DIBSection` of the depth of the `IlvBitmapData`. This has the following consequences:

- ◆ When using an `IlvIndexedBitmapData`, the memory allocated is now one-fourth of the memory allocated in ILOG Views 5.0.

- ◆ The size and the number of created `IlvBitmap` instances is limited only by the available system memory, whereas in previous ILOG Views versions there was a limit given by the system (approx 48 Megabytes by `IlvBitmap` and a limit of 192 Megabytes for all `IlvBitmap` instances on Windows NT).
- ◆ Performance is far better when using `IlvIndexedBitmapData` since no conversion to true color is needed anymore.
- ◆ The `IlvBitmap` depth is no longer always equal to the display depth, so using a depth-8 `IlvBitmap` to draw into using ILOG Views can give unexpected results since the colormap of the underlying `DIBSection` might not exactly match the colors used to draw.

IlvView

On Windows, the following methods are no longer taking the task bar into account:

- ◆ `IlvView::ensureInScreen`
- ◆ `IlvView::moveToScreen`

IlvWindowsDevice

The constructor of `IlvWindowsDevice` has an additional optional parameter of type `IlvWindowsPrinterFactory`.

IlvWindowsVirtualDevice

- ◆ The return type of `IlvWindowsVirtualDevice::getHDC` is now an `HDC` and no longer an unsigned `long`.
- ◆ The type of the parameter of `IlvWindowsVirtualDevice::setHDC` is now an `HDC` and no longer an unsigned `long`.

Typedef Changes

The typedef of `IlvWindowProc` has changed so that a port on Windows 64 bits will be possible later. It is now:

```
typedef IlvBoolean (* IlvWindowProc) (IlvAbstractView* view,
                                     IlvSystemView hWnd,
                                     IlvMsgParam iMessage,
                                     IlvWParam wParam,
                                     IlvLParam lParam,
                                     IlvAny& returned,
                                     IlvAny userArg);
```

`IlvMsgParam`, `IlvWParam`, and `IlvLParam` are three new typedefs that are respectively equivalent to unsigned int, signed int, and long for Windows 32 bits. That means that a code written for the previous version of ILOG Views still compiles and runs. However, the types will be different for Windows 64bits, and you should use the new types to be portable.

Note that the port on Windows64bits is not yet available, and even not precisely planned.

ILOG Views Charts Classes

ILOG Views Old Charts Classes

The new charts (contained in the `ilvcharts` library) can now be used with the old charts (contained in the `views31` library provided in the compatibility package). To make the old and the new charts compatible, the following classes and macros have been renamed:

- ◆ `IlvChartDataConstructor` -> `Ilv31ChartDataConstructor`
- ◆ `IlvChartDataClassInfo` -> `Ilv31ChartDataClassInfo`
- ◆ `IlvPreRegisterChartDataClass` -> `Ilv31PreRegisterChartDataClass`
- ◆ `IlvPostRegisterChartDataClass` -> `Ilv31PostRegisterChartDataClass`
- ◆ `IlvPredefinedChartDataIOMembers` ->
`Ilv31PredefinedChartDataIOMembers`

To be able to use both the old and the new charts at the same time, check for occurrences of these classes and macros in your old charts code and change them.

Note: *You do not need to modify your old charts code if you do not want to use both the old charts and the new ones at the same time.*

Deprecated Methods

The following methods are deprecated:

IlvAbstractChartDisplayer

- ◆ `IlvAbstractChartDisplayer::getOrdinateInfo()`
- ◆ `IlvAbstractScaleDisplayer::getCoordinateInfo(IIUInt)`

IlvSingleScaleDisplayer

- ◆ `IlvSingleScaleDisplayer::getCoordinateInfo(IIUInt)`
- ◆ `IlvSingleScaleDisplayer::getGridDisplayer()`
- ◆ `IlvSingleScaleDisplayer::setGridDisplayer(IlvAbstractGridDisplayer*)`

IlvMultiScaleDisplayer

- ◆ `IlvMultiScaleDisplayer::getCoordinateInfo(IIUInt)`

IlvScaleStepsUpdater

- ◆ `IlvScaleStepsUpdater::getCoordinateInfo()`

ILOG Views Gadgets Classes

IlvMessageLabel

An `IlvMessageLabel` object with a non-null thickness now draws its frame as a relief rectangle. The label is shifted accordingly. To keep the old behavior, that is, to remove the frame of the `IlvMessageLabel`, call the `IlvGadget::setThickness` method with 0 as a parameter, or call the `IlvGadget::showFrame` method with `IlFalse` as a parameter.

Look and Feel Management

ILOG Views now provides its predefined look and feels through separated libraries. This means that you will probably have to modify your makefiles in order to add the look libraries your application uses. If you are using shared libraries, you may only need to compile with the `ILVNODEFAULTLOOK` symbol to avoid linking with the look and feel libraries.

See the *Gadgets Look and Feel* section in the *User Manual (Controls/Gadgets/Part II/Understanding Gadgets)* for details. The following tables present the new libraries:

Table 3.1 Look Libraries for Windows platforms

Look	Standard Gadgets Library	Advanced Gadgets Library
Motif	<code>ilvmlook.lib</code>	<code>ilvamlook.lib</code>
Windows 3.11	<code>ilvwlook.lib</code>	<code>ilvawlook.lib</code>
Windows 95	<code>ilvw95look.lib</code> , <code>ilvwlook.lib</code>	<code>ilvaw95look.lib</code> , <code>ilvawlook.lib</code>
Windows XP	<code>ilvwxplook.lib</code> , <code>ilvw95look.lib</code> , <code>ilvwlook.lib</code>	<code>ilvawxplook.lib</code> , <code>ilvaw95look.lib</code> , <code>ilvawlook.lib</code>

Table 3.2 Look Libraries for UNIX platforms

Look	Standard Gadgets Library	Advanced Gadgets Library
Motif	<code>libilvmlook</code>	<code>libilvamlook</code>
Windows 3.11	<code>libilvwlook</code>	<code>libilvawlook</code>
Windows 95	<code>libilvw95look</code> , <code>libilvwlook</code>	<code>libilvaw95look</code> , <code>libilvawlook</code>

Look and Feel Callback

The callback called when the look is changed (see `IlvDisplay::addChangeLookCallback`) is now called once when an application using look and feel is launched.

Docking Panes

The management of docking bars has changed somewhat compared to ILOG Views 4.0. The new behavior ensures that the last visible docking bar of a dockable container should be elastic. This means that if the dockable container is resized, only this last docking bar will be resized.

ILOG Views Gantt Chart Classes

New Classes and Methods

`IlvGanttChart` has the following new classes:

- ◆ `IlvGanttHorizontalGridImpl`
- ◆ `IlvGanttHorizontalGrid`
- ◆ `IlvGanttLineGrid`
- ◆ `IlvGanttLineReliefGrid`
- ◆ `IlvGanttResourceGrid`
- ◆ `IlvGanttRowGrid`
- ◆ `IlvGanttCalendarGrid`

`IlvGanttChart` has the following new public methods:

- ◆ `IlvPalette* getGridPalette();`
- ◆ `void setGridPalette(IlvPalette*);`
- ◆ `IlBoolean isDrawingGrapherViewBorders();`
- ◆ `void setDrawingGrapherViewBorders(IlBoolean);`
- ◆ `IlSymbol* WorkAreaCallbackType();`
- ◆ `IlvRect& getWorkArea(IlvRect& area);`
- ◆ `IlvRect& getLineArea(IlvRect& area);`
- ◆ `IlvGraphic* setLineGrid(IlvGraphic* grid, IlvBoolean redraw, IlInt layer);`
- ◆ `IlvGraphic* getLineGrid();`
- ◆ `IlvGraphic* setRowGrid(IlvGraphic* grid, IlvBoolean redraw, IlInt layer);`
- ◆ `IlvGraphic* getRowGrid() const;`

- ◆ `void setDoubleBuffering(IlBoolean);`
- ◆ `IlBoolean isDoubleBuffering() const;`

Incompatibilities

The signatures of the following methods of `IlvGanttChartForm` have been changed:

- ◆ `IlvGraphic* setCompositeScale(IlvGraphic*, IlBoolean, IlBoolean);`
- ◆ `IlvGraphic* getCompositeScale() const;`
- ◆ `IlvGraphic* setCompositeGrid(IlvGraphic*, IlvBoolean);`
- ◆ `IlvGraphic* getCompositeGrid() const;`

Behavior Changes

`IlvGanttChart::rowResized(IlvUShort, IlvPos)` calls the new “Work Area” callback.

The default layer for the Gantt lines is changed from 0 to 1.

- ◆ `void addLine(IlvGanttLine* line, IlBoolean redraw, int layer=1);`
- ◆ `void insertLine(IlvGanttLine* line, IlUShort row, IlBoolean redraw, int layer=1);`

Deprecated Methods

`IlvGanttChartForm::setCompositeGrid()` is deprecated. Use `IlvGanttChart::setRowGrid()` instead.

Samples

In the sample folder of the Gantt module, `<ILVHOME>/samples/gantt`, the load and month samples are considerably revised. Two new samples, `simple` and `calendar`, are added.

Bug Fixes

ILOG Views Gantt had the following bugs that are now fixed:

- ◆ `IlvGanttChart::psDump` dumping the grids of the grapher views.
- ◆ The `IlvGanttChart` could not be properly resized before it was added to a container.
- ◆ `IlvGanttChart` could not switch to mono view interactively by dragging the handle between the grapher views.

ILOG Views Maps Classes

IlvShapeFileReader

Constructors have been modified to take the `.shx` file into account:

- ◆ Added a `shxFileName` parameter to the `IlvShapeFileReader` constructor.
- ◆ Added a `shxIndex` to the `IlvShapeFileReader` constructor.

IlvObjectSDOWriter

To resolve incompatibility, removed a documented protected method from `IlvObjectSDOWriter`. The `IlvObjectSDOWriter::getSDOGeometryString` method has been removed. This class no longer uses Strings in order to save geometries into Oracle Spatial.

Bug Fixes

ILOG Views Maps had the following bugs that are now fixed:

- ◆ The default `IlvObjectSDOKeyExtractor` not supporting the Number Oracle type.
- ◆ `IlvObjectSDOReader` not reading more than 65536 points.
- ◆ `IlvObjectSDOFeatureIterator` returning the wrong Multi Area geometries.
- ◆ `IlvMapGeneralPath`: bad bounding box computation under specific circumstances.
- ◆ Could not use Oracle 9i Spatial.
- ◆ Read/write of some `IlvSDOLayer/IlvObjectSDOLayer` layers might have led to a crash.
- ◆ SDO sample requiring an ILOG DB Link license.
- ◆ The shape reader crashing when the file contained valued geometries without values.
- ◆ `IlvMapLoader` not taking the insertion layer into account.
- ◆ `IlvMapsRegisterLicense` not registering the license correctly.
- ◆ `DoubleAttributeReader::read` (Shapefile reader) not switching to C locale.
- ◆ Could not customize the `IlvDefaultObjectSDOTileLoader`.
- ◆ The constructor `IlvObjectSDOLayer(IlvSDOTileLoader*, IlvTileCache*, const char*)` not working.
- ◆ FMM in `IlvMapCoordinateViewer`.
- ◆ Crash when swapping/deleting/creating multiple buffers.
- ◆ Problem when a view attached to an ILOG Maps GUI component was deleted.
- ◆ `IlvObjectSDOWriter::populateIndexes` could misbehave.
- ◆ Application consuming too much cpu time when using load-on-demand.
- ◆ Runtime Licenses not initialized properly with library `ilvdbmaps`.
- ◆ `IlvObjectSDOWriter` forgetting to raise some errors.

- ◆ `IlvObjectSDOUtil::IsUsing816` not working correctly.
- ◆ The destructor of `IlvMapCoordViewer` could produce MLK.
- ◆ Crash in `IlvTileController::updateViews`.
- ◆ `IlvMapGeneralPath` badly handling palette (side effects).

Release Notes for Version 4.0.2

These release notes describe the changes that have been made to ILOG Views since version 4.0.1. The document describes:

- ◆ *New Features*
- ◆ *System Changes*

New Features

The ILOG Views Component Suite includes the following new features in Version 4.0.2:

- ◆ *Web Deployment*
- ◆ *Prototypes*

Web Deployment

The new ILOG Views Web Deployment package allows you to create Web applications from ILOG Views applications.

For details refer to the Web Deployment documentation.

Prototypes

Several new features have been added to the Prototypes package:

- ◆ *Switch Accessor*
- ◆ *Cut/Copy/Paste*
- ◆ *Animation Timer On/Off*

Switch Accessor

A new control accessor has been added.

The Switch accessor (class `IlvSwitchAccessor`) implements a switch statement.

Parameters

- ◆ **Switch:** An expression that should return an integer. Depending on its result, the attribute 0...N will be assigned the value of the parameter.
- ◆ **case 0:** Must be an attribute of the prototype or the value "". If Switch evaluates to 0, the behaviors of the attribute named in this parameter will be executed.
- ◆ **case 1:** Must be an attribute of the prototype or the value "". If Switch evaluates to 1, the behaviors of the attribute named in this parameter will be executed.
- ◆ ...
- ◆ **case N:** Must be an attribute of the prototype or the value "". If Switch evaluates to a value equal to or greater than N, the behaviors of the attribute named in this parameter will be executed.

Example

A traffic light with varying settings can be implemented like this:

```
Value      Integer
do
  Switch Value
  case 0 doRed
  case 1 doOrange
  case 2 doGreen
  case 3 Anomaly

doRed
do
  greenEllipse.visible=False
  orangeellipse.visible=False
  redEllipse.visible=True
  doBlink=False

doOrange
do
  greenEllipse.visible=False
  orangeellipse.visible=True
  redEllipse.visible=False
```

```

doBlink=False

doGreen
do
  greenEllipse.visible=True
  orangeellipse.visible=False
  redEllipse.visible=False
  doBlink=False

Anomaly
do
  greenEllipse.visible=False
  orangeellipse.visible=True
  redEllipse.visible=False
  doBlink=true

doBlink Boolean
do
  blink orangeEllipse.visible 150

```

For information on additional control and other accessors, refer to the *ILOG Views 2D Graphics User's Manual*, "Predefined Accessors."

Cut/Copy/Paste

Cut/copy/paste has been added to the Edit facilities when using ILOG Studio for Prototype extension functions.

In the Group Inspector Panel you will now find cut/copy/paste commands in the Edit menu of the Attributes and Behavior pages.

- ◆ You can copy or cut a whole attribute and its behaviors by selecting the first line of an attributes tree and selecting Edit > Copy or Edit > Cut.
- ◆ On the Attributes page you can copy or cut a single behavior by selecting the behavior's line and then Edit > Copy or Edit > Cut.
- ◆ You can paste the contents of the attribute clipboard by first selecting a line where you want the attribute to be inserted and then selecting Edit > Paste.

For full details on other Edit functions, refer to the *ILOG Views 2D Graphics User's Manual*, "Creating and Using Prototypes."

Animation Timer On/Off

An on/off toggle has been added for animation timers. This additional control is available from the View menu of the ILOG Studio Menu Bar with Prototypes Extension.

This additional command is described below.

ToggleTimers

Label	Toggle Animation Timers
Path	View menu
Category	prototypes
Action	Turns on or off the animation timers of the prototype's animation accessors, thereby allowing you to edit the prototype and then test its behavior.

For the other prototypes commands, refer to the *ILOG Views 2D Graphics User's Manual*, "Prototypes Extension Commands."

System Changes

The ILOG Views Component Suite includes the following system changes in Version 4.0.2:

- ◆ *Platform Adjustments*
- ◆ *Note for Unix Users: Motif and Shared Libraries*

Platform Adjustments

In a constant effort to provide you with the best development environments available, ILOG continually updates its supported platforms. This effort to follow the evolution of compilers and operating systems provides opportunities to add platform upgrades as well as abandoning from time to time the support of older platforms. We publish here the list of ports that will be modified in the next release of the ILOG Views Component Suite, Version 4.0.2.

New Ports

This release includes:

- ◆ A new 64-bit port for Sun UltraSparcStation users. This port is named `ultrasparc64_5_5.0`.
- ◆ A new library format for HP 11 users that supports the `-AA` compilation flag. This port is named `hp32_11_3.30` and includes the following library formats:
`static_pic_mt_AA` and `shared_mt_AA`.

Warning for SGI Users

This release (Version 4.0.2) will be the final release of the ILOG Views Component Suite that supports SGI. Future releases of the ILOG Views Component Suite coming in 2002 will not provide a port for SGI.

ILOG Views 4.0.2 will continue to be supported on the SGI platform until June 2003. We encourage users of the ILOG Views Component Suite on an SGI platform to prepare a migration plan on another platform supported by the ILOG Views Component Suite, or to contact their ILOG representative if the maintenance period needs extension.

Platform Upgrades

The following ports are provided for the last time in this release of the ILOG Views Component Suite (Version 4.0.2). The next release will continue to deliver a port for these operation systems, but for a more recent version of compiler and operating system:

- ◆ `msvc5`
- ◆ `hp_10_1.0`
- ◆ `sparc_5_4.2`
- ◆ `rs6000_4.3_3.6`
- ◆ `i86_linux2_glibc2.1_egcs1.1`
- ◆ `alpha_4_6.1`

Note for Unix Users: Motif and Shared Libraries

The use of `libmviews` (Motif-based) is deprecated in shared library format. Since Version 4.0, all shared libraries provided by ILOG Views are built using `libxviews` and are incompatible with `libmviews`. Upon request at your ILOG support site, ILOG can provide a new set of shared libraries built on top of `libmviews` for your platform. For future versions, `libmviews` will be provided only as a static library and will not be supported in shared format.

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