



# **IBM ILOG CP Version 1.5**

## **Release Notes**

**June 2009**

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# ***Release Notes***

IBM® ILOG® CP Version 1.5 is a new version of the IBM ILOG constraint programming libraries. It includes the Solver and IIM (Iterative Improvement Methods) libraries, built on IBM ILOG Concert Technology. It also includes the Scheduler and Dispatcher libraries for more specialized modeling of scheduling and vehicle routing problems.

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## **Compatibility with IBM ILOG CP Optimizer**

With this release of IBM® ILOG® CP and the release of IBM ILOG CP Optimizer V2.3, you can create a C++ application that uses both products in the same executable. This enables you to evolve your IBM ILOG CP application by adding new modules using IBM ILOG CP Optimizer.

For more information about this feature, please refer to the IBM ILOG CP Optimizer V2.3 documentation.

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## **Compatibility with previous versions**

The IBM® ILOG® CP Version 1.5 API is compatible with ILOG CP Version 1.4.

IBM ILOG CP V1.5 contains the following minor versions of its component libraries:

- ◆ IBM ILOG Solver Version 6.7 built on IBM ILOG Concert Technology Version 2.9
- ◆ IBM ILOG Dispatcher Version 4.7
- ◆ IBM ILOG Scheduler Version 6.7

Each component is compatible with its previous minor version. There is more information on compatibility in the library specific sections of this document.

## Solver

IBM® ILOG® Solver Version 6.7 is a new Solver version. It uses IBM ILOG Concert Technology Version 2.9.

### Resolved issues

These are the registered issues that are fixed in IBM ILOG Solver V6.7 since the previous release (Solver V6.6).

*Solver resolved issues*

Issue ID	Issue
SOLVER-205	Once a trace has been defined on the solver, setting a different trace is not possible without re-extraction of the model
SOLVER-203	Memory freed twice in composite evaluators/comparators/predicates
SOLVER-201	IlcSoftCtHandler crash with uncaught exception
SOLVER-142	Naming error in the header of <code>/examples/src/tutorial/crews_partial.cpp</code>

## Scheduler

IBM® ILOG® Scheduler Version 6.7 is a new Scheduler version. It uses IBM ILOG Concert Technology Version 2.9, IBM ILOG Solver Version 6.7, and IBM ILOG IIM Version 6.7.

### Compatibility with previous versions

IBM ILOG Scheduler V6.7 is compatible with the following ILOG Scheduler versions: 6.6, 6.5, 6.4, 6.3, 6.2, 6.1, 6.0, 5.3, 5.2.1, 5.2, 5.1, and 5.0. To ensure compatibility with ILOG Scheduler V5.x, you must define the macro ILSOLVER5.

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## Resolved issues

This is the list of registered issues that are fixed in IBM ILOG Scheduler V6.7 since the previous release (Scheduler V6.6).

*Scheduler resolved issues*

Issue ID	Issue
SCHEDULER-248	Crash when using <code>IloResourceConstraint::setNext(IloResourceConstraint)</code> if one of the resource constraint is not added to the model
SCHEDULER-247	<code>IloResourceConstraint::setNext</code> is ignored on a discrete resource
SCHEDULER-246	Schedule precedence graph may crash when using breakable activities
SCHEDULER-238	Many warnings when using CP

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## Requirements

The IBM ILOG Scheduler V6.7 release requires IBM ILOG Concert Technology V2.9 and IBM ILOG Solver V6.7. To include in your application all the necessary components of Scheduler V6.7 and the underlying libraries, just type:

```
#include <ilsched/iloscheduler.h>
```

The Scheduler 6.7 release may require IBM ILOG IIM V6.7 (for Large Neighborhood Search). To include all of the components of IBM ILOG IIM V6.7 in your application just type:

```
#include <ilsolver/iimls.h>
```

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## Dispatcher

IBM® ILOG® Dispatcher Version 4.7 is a new Dispatcher version. It uses IBM ILOG Concert Technology Version 2.9 and IBM ILOG Solver Version 6.7.

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## Resolved issues

This is the list of registered issues that are fixed in IBM ILOG Dispatcher V4.7 since the previous release (Dispatcher V4.6).

*Dispatcher resolved issues*

Issue ID	Issue
DISPATCHER-72	IloVehicleLIFOConstraint ignored on models with vehicle LIFO constraints and which instantiate a route (close a route).

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## Concert Technology

IBM® ILOG® Concert Technology Version 2.9 requires you to recompile and link your C++ applications.

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## Port changes

With this release of IBM® ILOG® CP, certain ports have been removed. For most of these ports, more recent compiler and/or operating system versions are now supported.



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## Deprecated and removed ports

*IBM ILOG CP 1.5 deprecated and removed ports*

Port name	Platform	Status	Recommended replacement
power32_aix5.2_7.0	IBM Power AIX 5.2 IBM XL C/C++ 7.0 32-bit	<b>deprecated</b> and <b>removed</b> : no longer available now	AIX V5.3 or higher Compiler support is now IBM XL C/C++ 7.0 - 10.0
power64_aix5.2_7.0	IBM Power AIX 5.2 IBM XL C/C++ 7.0 64-bit	<b>deprecated</b> and <b>removed</b> : no longer available now	AIX V5.3 or higher Compiler support is now IBM XL C/C++ 7.0 - 10.0

### IBM Power AIX 5

The ports named `power32_aix5.2_7.0` and `power64_aix5.2_7.0` were **deprecated** in CP V1.4. They have been **removed** from this release. The recommended replacement is to migrate to AIX V5.3 or a higher version.



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