Installation and Upgrade

Klocwork Insight 10.0 SR5

Document version 1.5

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Supported platforms

Both the Klocwork Server package and Desktop Analysis plug-ins are supported on the following operating systems (except where noted). This means that Klocwork has performed the full test suite on these operating systems with certain hardware and will provide technical support as specified in the Klocwork support policies.

Note: It is not possible to use Klocwork tools with SELinux (Security-Enhanced Linux) enabled.

Processor	Operating system
Sun SPARC	Sun Solaris 10, 11
Intel and AMD **32 bit and 64 bit**	Klocwork supports all Linux distributions such as Fedora, Open Suse, Red Hat Enterprise Linux, Ubuntu, CentOS and Debian running glibc 2.4 or greater (use *getconf GNU_LIBC_VERSION* to find out your version). If you have any questions about your distribution, please contact Customer Support.
	Windows 8 Windows 7 Windows Vista Windows XP Professional Windows Server 2012 Windows Server 2008 Windows Server 2003
	Mac OS X Lion (10.7) Mac OS X Snow Leopard (10.6)
IBM Power5 **64 bit**	IBM AIX 5.3, TL 7 (Server package only), IBM AIX 6.1 TL 4 (Server package only)

Operating system patches and packages

The following patches or packages are required for running Klocwork products (either server or user installations) on certain operating systems. They are in addition to the regular maintenance patches for your operating system.

If you are installing on...	you need...
Solaris 10	The zlib package (not required if you are installing only the Klocwork developer tools). Check that the zlib package is installed. To check that the zlib package is installed, either run `$ pkginfo |grep zlib` or look for a file called `libz.so` under `/usr/lib` or `/usr/local/lib`. If the zlib package is installed, you will see the package SUNWzlib, or SMCzlib, or both packages.

Linux x86, 64-bit	The 32-bit compatibility libraries must be installed. Klocwork Insight works on 64-bit platforms in 32-bit emulation mode, so in order for Klocwork Insight to work on Linux 64-bit platforms, you must ensure that the 32-bit libraries are installed. The way you check and install 32-bit libraries depends on your Linux distribution.
	For example, for Ubuntu 13.10 and later, run the following command to install 32-bit compatibility libraries:
	`$ sudo apt-get install lib32ncurses5:i386`
	The 32-bit version of the `libncursesw:i386` library must be installed. For earlier versions of Ubuntu, consult the documentation.
	• For Fedora Core and Redhat Enterprise Linux, run these commands:
	`$ sudo yum install glibc.i686`
	`$ sudo yum install libgcc.i686`
Any Linux distribution that does not install the X11 version of X Window by default	xorg-XFree86-deprecated-libs

Operating systems that support Flexera FLEXnet ID Dongles

A FLEXnet ID Dongle is a hardware key, also referred to as a dongle, used to lock software access to the machine on which it is physically installed.

You can use FLEXnet ID Dongles in situations where you:

• cannot release any system information such as MAC addresses or IP addresses
• cannot share a license server between multiple sites

There is more information on FLEXnet ID Dongles on the Flexera Web site.

To use Flexera FLEXnet ID Dongles, use one of the following operating systems with the appropriate FLEXnet driver, with HOSTID_FLEXid9 using FLEXnet 11.10.1.0. You can obtain the appropriate driver for your operating system from Klocwork Customer Support.

Operating system	FLEXnet driver installer
Red Hat Enterprise Linux 5.x, 6.x	aksusbd-redhat-1.8.1-3.i386.rpm
Windows 8 Windows 7 Windows Vista Windows XP Windows Vista (32 bit and 64 bit) Windows Server 2003	FLEXId_Dongle_Driver_Installer.exe (choose the FLEXid9 driver)

Notes:

• You must install Flexera FLEXnet ID Dongles at the root/Administrator privilege. For Unix, use su/sudo. For Windows, use an Administrator group.
• After installing Flexera FLEXnet ID Dongles on Windows, restart the Klocwork Servers.
• The Linux Red Hat Package Manager (RPM) installer emits an error message about checkpc. Ignore the error message.

Disk space requirements

Disk space requirements for installation

A complete installation requires 400 to 450 Mbytes for installation. Additional disk space is required temporarily during installation.

Disk space requirements for data storage

Klocwork Insight data includes the source files, configuration files, object files, tables, and the database. The total disk space needed for a single integration-build analysis will be the total of all this data. If you use Klocwork incremental analysis, the object file size and table size is needed only once per project.

Some sample projects to show how size can vary

Project	Language	Lines of code	Object file size (Mbytes)	Table size (Mbytes)	Database size (Mbytes)	Total size (Mbytes)
Boost	C/C++	140,000	393	17	84	1,638
Firefox	C/C++	1,600,000	2,800	606	702	3,174
X.org	C	1,500,000	2,600	608	720	3,928
Linux	C	3,100,000	7,200	1,100	1,200	8,089
Common C++	C/C++	20,000	168	23	45	236
Python	C	214,000	114	52	84	143
MySQL	C/C++	350,000	781	133	167	463

Processor and RAM requirements

Server and complete installations

- Processor speed: 2 GHz or better
- RAM: Minimum 2 Gbytes for a single core machine and a minimum of 1 GB of memory per processor or core on multicore machines. More than 2 Gbytes may be required for very large analyses. Note that the size of a build and its RAM requirements depend not only on the lines of code, but also on the number and complexity of relationships in the code.

User installations

Klocwork client	Processor speed	RAM
Klocwork for C/C++	1 GHz or better	1 Gbyte. On Windows and with precompiled headers, the minimum RAM is 2 GB.
Klocwork for Java	1 GHz or better	1 Gbyte.
Klocwork Review and Klocwork Cahoots	1 GHz or better	1-2 Gbytes recommended

Java Virtual Machine requirements

Windows

If you don't have Java 1.7 Update 25 installed, the Server, Desktop plug-in or Distributed Analysis installation package will install Java 1.7 Update 25. It will be installed in `<server_install>/_jvm/bin/` and `<desktop_plugin>/_jvm/bin/`. Your system must meet the requirements [1] for this version of Java.

If you have a later update of Java 1.7, Java will not be installed, and Insight will use the already installed version.

The installation package detects whether you have a 32-bit or 64-bit operating system and installs the appropriate version of Java.

Linux and Solaris

Insight installs Java 1.7 Update 25. Your system must meet the requirements [1] for this version of Java.

On Linux, there is a separate installation package for both 32-bit and 64-bit Java. Select the one that matches your operating system.

Only 32-bit Java is supported for Solaris.

Mac

You must install JVM 1.6 on your machine before installing the Klocwork Server package or a desktop analysis plug-in. If you have a previous JVM version installed and you try to install the Server, you will see the error message, "Version of Java is too old". Apple supplies their own version of Java. Use the Software Update feature on your Mac.

Only 32-bit Java is supported for Mac.

AIX

Insight installs and uses IBM Java 1.6, so your system must meet the requirements for Java 1.6. At the time of publication, the link to supported system configurations for IBM Java 1.6 was:

http://www.ibm.com/developerworks/java/jdk/aix/service.html

Only 32-bit Java is supported for AIX.

IDE plug-ins

The Klocwork Desktop Java Plug-ins for Eclipse and IntelliJ IDEA require Java 1.6 or greater. You must ensure that your IDE is running on Oracle (Sun) Java 1.6 or greater.

Supported IDEs

Note: Klocwork Insight also has successful integrations with other Eclipse-based IDEs.

Supported C/C++ IDEs

IDE	Version
Eclipse	3.4, 3.5, 3.6, 3.7, 4.2 and 4.3
Wind River Workbench	3.1, 3.2, 3.3
QNX Momentics	4.6, 4.7
Microsoft Visual Studio	.NET 2005, .NET 2008, .NET 2010, .NET 2012, .NET 2013. The Express edition of Visual Studio is not supported.

Supported C# IDEs

Klocwork C# analysis is available for Microsoft Visual Studio .NET 2005, 2008, 2010, and 2012. The Express edition of Visual Studio is not supported.

The Smart Device project type is not supported.

Supported Java IDEs

IDE	Version
Eclipse	3.4, 3.5, 3.6, 3.7, 4.2, 4.3
JetBrains IntelliJ IDEA	10.0, 10.5, 11.x, 12.x, 13
IBM Rational Application Developer for WebSphere	7.5.x at the level of "Ready for IBM Rational Software" for Eclipse-based solutions

Supported browsers

A browser is required for Klocwork Review and for Klocwork Cahoots.

- Mozilla Firefox - the current, latest release except for the AIX platform, which is at 3.5.13.1
- Internet Explorer 8*, 9 and 10
- Apple Safari 5.x
- Google Chrome - the current latest release

*Not supported for Klocwork Cahoots

Note: Klocwork Review and Klocwork Cahoots also require that you enable cookies in your browser.

Supported source code management systems for Klocwork Cahoots

Cahoots has been tested with the following, for both pre-checkin and post-checkin code reviews:

SCM	Supported plug-ins
Base ClearCase 7.x	Eclipse, IntelliJ IDEA, Visual Studio*
CVS 1.12.x	Eclipse, IntelliJ IDEA
Git 1.7.x	Eclipse, IntelliJ IDEA, Visual Studio**
TFS 2010	Visual Studio
Perforce server 2005.2 or higher	Eclipse, Visual Studio
Subversion 1.4.x, 1.6.x, 1.7.x	Eclipse, IntelliJ IDEA, Visual Studio

*Base ClearCase is not supported in Visual Studio 2005/2008

**Git is not supported in Visual Studio 2005

***Subversion 1.4.x is not supported by the Visual Studio desktop analysis plug-in

Note: All of the SCM's are supported by using the commands kwcodereview (pre-checkin) or kwscm (post-checkin) on the command-line.

For other SCMs, please contact Klocwork Customer Support [2].

C/C++ compilers supported for build integration

As part of creating a build specification, Klocwork Insight automatically searches for the following compiler types by default. If your compiler is not on this list, contact Klocwork Customer Support [2] so that we can support your compiler. For details on compilers and on creating build specifications generally, see Creating a C/C++ build specification.

Compiler type	Klocwork compiler code	Names of common compiler variants	Introduced	Improved
Analog Devices Blackfin and TigerSHARC	dsp	ccblkfn, ccts	9.5	
Archelon C	archelon	mcc	10.0	
ARM	armcc armlink ar	armcc, armcpp, tcc, tcpp armlink armar	Pre-9.5	
CADUL C cross compiler for Intel 80X86	cadul_compile cadul_link	ccu38o lnku38a	9.6	
CEVA compiler (NVIDIA)	ceva	c16cc	10.0	
Clang	gnu	clang clang++	9.6 SR3	
CodeWarrior Freescale S12	chc12	chc12	9.5	
Compiler caching tools	ccache	ccache, distcc	9.5	
Cosmic	cosmiccompile cosmiclink	cxs12x, cx6812, cx6816, cxstm8 clnk	9.5	9.6
Embarcadero compiler/linker	bcc blink	bcc32 ilink32	9.5	
Fujitsu FR Family	fcc	fcc911s, fcc907s	9.5	
GNU	gnu gnu_ld	gcc, g++, cc, c++ ld	Pre-9.5	
GNU ar	ar	ar	Pre-9.5	
Green Hills GHS	ghs ghscom ghslink ghsar	gcc, gcx, ccarm, cxarm, ccmips, cxmips, ccintppc, cxintppc ecomarm, ecomppc elxr ax	Pre-9.5	9.6
Hexagon Tools	qdsp	qdsp-gcc, qdsp-g++	9.5	
HI-TECH C compiler/linker	picc piclink	picc hlink	9.6	
Hitachi ch38	ch38	ch38.exe	Pre-9.5	
IAR 78k	iar_78_compile	icc78k0r	10.0	
IAR H8	iar_h8_compile	icch8	10.0	
IAR M32C	iar_m32c_compile	iccm32c	10.0	
IAR SH compiler/linker	iar_sh_compile	iccsh	10.0	

IAR Systems C compiler/linker for 8051/NEC V850/MSP430/M16C/Renesas RX210/CR16C/ARM/Atmel AVR (see Limitations)	icc8051 iccv850 icc430 xlink iccm16c iar_rx_compile iar_rx_link icccr16c iccarm ilinkarm iar_avr_compile_filter	icc8051 iccv850 icc430 xlink iccm16c iccrx ilinkrx icccr16c iccarm ilinkarm iccavr	Pre-9.5	9.6
IBM XL C/C++	xlc	cc, xlc, xlC and related commands (see `<klocwork_install>/config/kwfilter.conf` for full list)	9.5	
ImageCraft AVR	iccavr	iccavr, iccavr32	9.5	10.0
Intel C++	icc icl	icc, icpc icl	Pre-9.5	
Intel iC-386	c386	c386a	9.6	
Keil CA51	c51 lx51	c51, cx51, c166, c251 lx51, l166, l251	9.5	9.6
Marvell C compiler/linker	marvell_compile	ccmsa	10.0	
MetaWare High C/C++	arc ararc ldarc mcc	hcarc, hcac ararc, arac ldarc, ldac mcc	Pre-9.5	9.5
Metrowerks CodeWarrior	mwc	mwcc, mwccmcf	Pre-9.5	
Microchip MPLAB pic24	pic30	pic30-gcc	9.5	
Microchip MPLAB pic32	pic32	pic32-gcc, pic32-g++, xc32-gcc, xc32-g++	10.0	
Microsoft Visual C++	mscompile mslink	cl, clarm link, lib	Pre-9.5	
Microtec	mcx mlk	mcx mlk	9.5	
Microware Ultra C for OS-9	ultra	xcc	10.0	
Motorola DSP563	moto563compile moto563link	g563c dsplnk	9.6	
MPLAB C18	mcc18 mplink	mcc18 mplink	9.5	
Nvidia CUDA	nvcc	nvcc	9.6	
Panasonic C	cc103S ld103S	cc103S ld103S	9.5	
Paradigm C/C++	pcc plink	pcc plink	9.6	
Plan 9 C	plan9 ar	0c, 1c, 2c, 5c, 6c, 7c, 8c, 9c, kc, qc, vc ar.l	9.5	
QNX	qnx	qcc	Pre-9.5	
Renesas 78K0R	ren_cc78 cc78k0r	ren_lk78 lk78k0r	9.6	
Renesas CX	ren_cx	cx	10.0	

Renesas M32R family compiler/linker	ren_m32_compile/ren_m32_link	cc32r (compiler) lnk32r (linker)	10.0	
Renesas SuperH and RX family	rxcompile rxlink	rxc, shc optlnk	9.5	
Renesas R8C and M16C families	nc30	nc30	9.5	
Renesas V850	ca850 ld850	ca850 ld850	9.5	
Rowley Crossworks for MSP430	rowley_compile	hcl	10.0	
SN Systems compiler for Sony	snc	psp2snc, ps3ppusnc	10.0	
Star Core Freescale	scc sc100-ld	scc sc100-ld	Pre-9.5	
Sun Studio C/C++	sun	CC, cc	Pre-9.5	
Target Chess	chess	chesscc	10.0	
Tasking 68K Toolset compiler/linker	tasking_68_compile tasking_68_link	c68360, cp68360, c68332, cp68332 (compiler) llink (linker)	10.0	
Tasking ARM Toolset compiler/linker	tasking_arm_compile tasking_arm_link	ccarm (compiler) lkarm (linker)	10.0	
Tasking Classic Toolset for C166 compiler/linker	tasking_classic_166_compile tasking_classic_166_link	cc166 l166	9.5	9.6
Tasking IFX SLE88	cj2	cj2	9.5	
Tasking Tricore	tricore_compile tricore_link	cctc ltc	9.5	
Tasking VX Toolset for C166 compiler/linker	tasking_166_compile tasking_166_link	cc166 lk166	9.6	
Tensilica Xtensa C/C++	xtensa	xt-xc xt-xc++	9.6	
TI ARP32 C/C++	cl_arp32	cl-arp32	9.5	
TI msp430 C/C++	cl430	cl430	9.5	
TI tms320c6x and tms320c55x	cl6x link6x ar6x	cl6x, cl55 link6x ar6x	Pre-9.5	
TI tms320C3x/4x C	cl30/lnk30	cl30 (compiler) lnk30 (linker)	10.0	
TI tms320c28x	cl2000 lnk2000 ar	cl2000 lnk2000 ar2000	9.5	
TI tms470	cl470 lnk2000 ar	cl470 lnk470 ar470	9.6	
TriMedia tmcc	tmcc	tmcc, tmCC	Pre-9.5	
Watcom compiler/linker	watcom_compile watcom_link	wcc, wpp, wcc386, wpp386 (for compiler) wlink (for linker)	10.0	
WinAVR	gnu ar	avr-gcc, avr-g++ avr-ar	9.6	

Wind River Diab	diab	dcc, dplus	Pre-9.5	
	dld	dld		
	ar	dar		
Wind River GCC	gnu	ccppc	9.5	
ZiLOG eZ80	ez80cc	ez80cc	9.5	
	ez80link	ez80link		

Supported C# language specifications

Klocwork Insight support versions 1.0, 2.0 and 3.0 of the C# language specification.

Application servers supported by Klocwork JSP scanning

Klocwork's JSP scanning supports the following application servers:

Application server	Version
Apache Tomcat	5.5, 6.0, 7.0
BEA WebLogic	10

Supported versions of MySQL

For Windows, Linux and Mac, the Database Server is a MySQL 5.1.68 database server. For Solaris and AIX, the Database Server is a MySQL 5.1.66 database server. If you want to use your own manually installed MySQL database server, it must be the appropriate version. If necessary, upgrade your separate MySQL database before you install or upgrade Klocwork Insight.

Supported LDAP servers

- Windows Server 2003: Microsoft Active Directory
- Windows Server 2008: Microsoft Active Directory
- Linux: OpenLDAP
- Sun Java System Directory
- Novell eDirectory

References

[1] http://java.sun.com/javase/6/webnotes/install/system-configurations.html
[2] mailto:support@klocwork.com

Release Notes

These release notes cover Klocwork Insight 10.0 and Klocwork Cahoots. For new features in this version, see What's New.

Changes affecting migration

This section details product changes that affect how Insight data is migrated from a previous version. For general information on upgrading, see Upgrading from a previous version.

Japanese for migrated projects: To display Japanese issue messages, traceback and context-sensitive issue help for a migrated project, set the "locale" project property to "ja" with the kwadmin set-project-property command. Then, run kwbuildproject with the *--url* option so that the project properties are used in the analysis. Note that Insight will display Japanese issue messages and traceback only for issues that are detected in a Japanese build (that is, a build run on a machine with the system locale set to Japanese). Other issues will remain in English (until they are detected in a Japanese build).

Disabled checkers: If you chose to migrate your projects_root directory, make sure you have the same checker configuration as in the last release before your first 10.0 integration build analysis.

Migrating from 9.2 to 10.0

When migrating from 9.2 to 10.0, statuses of local defects which have been synchronized with the server, but not detected by system builds, will be lost.

Changed and removed commands and options

The following table lists changed and removed commands in this release. For more detail on Klocwork commands, see Command Reference.

Important: These changes can affect existing scripts.

Command	Details
kwstackoverflow	Due to the complexity and accuracy of kwstackoverflow, we have discontinued this product. In the future, we will work towards a unified stack analysis tool that works with our existing products.
kwdspparser	Added the --useenv option which allows you to use PATH, INCLUDE, LIBPATH and LIB environment variables instead of Visual Studio variables.
kwinspectreport	This command has been removed. You can now save reports using the Web API.
kwsupport	This command has been removed. You can now collect data and submit to Klocwork Support for additional help with build errors using the kwcollect command.

Changes to system requirements

This section lists changes to the System requirements.

Added

Platforms

- Windows 8
- Windows Server 2012
- Sun Solaris 11

IDEs

- Eclipse 4.3

Browsers

- Internet Explorer 10

No longer supported

Platforms

- Sun Solaris 9

Changes affecting existing users

This section details changes that you should be aware of if you've used a previous version of Insight. See also What's New for a summary of major new features in this version.

Klocwork Architect removed

Klocwork Architect has been removed and is no longer a part of the Klocwork Insight package.

Due to the removal of Klocwork Architect, support for usage rules (.uconf) files has also been removed and these file types should no longer be used.

See Integrating with Structure101 for information on using Structure101, a code visualization and organization tool that now integrates fully with Insight.

Licensing changes

9.x licenses are not compatible with Insight 10.0. You must get a new license to use the latest version of the product. Contact Klocwork Customer Support [2] for more details.

Changes to Klocwork Review

- You can now create custom dashboard reports in Klocwork Review. See What's New for more details.
- We've split the Configuration Editor into two separate editors. For more information, see Configuring checkers for the integration build analysis.
- You can now use Klocwork Review to import existing projects, server configuration settings, and code reviews into your new projects_root. See Import your existing projects into a new projects root for more information.

Changes to Klocwork Cahoots

- The Klocwork Cahoots documentation has moved.
- You can create custom reports in Klocwork Cahoots. See the Cahoots documentation for more details.
- The JSON output from the `search` action of the code review Web API has changed. Redundant fields were removed from the root of the output reply. The following listing shows a typical JSON output response:

```
{
    "type": "action",
    "item": {
        "author": "jdoe",
        "responsible": "pholmes",
        "creation_date": 1376328066170,
        "file_revision": {
            "file": "a.c",
            "is_directory": false,
            "is_binary": false,
            "change_type": "MODIFIED",
            "removed_lines": -1,
            "added_lines": -1,
            "file_revision_id": 1
        },
        "line": 3,
        "text": "find a way to fix this",
        "complete": false
    }
}
```

Changes to access control

- You can now enable authentication when you use basic access control. This allows you to decide if users need to login with a password to access projects (authentication enabled) or can simply see all projects by logging in with any user name (authentication disabled). For more information, see enabling authentication.
- A guest account has been added which allows anyone to login with the username 'guest' and have developer access rights. For more information, see Managing the Guest account .

Changes to desktop analysis

- Klocwork Insight now integrates with IncrediBuild 4.6. The IncrediBuild integration now runs on 64 bit Java VMs. See Running Insight in an IncrediBuild environment for further details.
- The Klocwork Desktop Plugin for Visual Studio now generates a build specification on a per-project basis, using the Visual Studio project configuration. In previous versions of Klocwork Insight, the build specification was generated on a per-project basis, using the active Visual Studio solution configuration.

Changes to the Configuration Editor

- The Configuration Editor is no longer used to edit taxonomies and categories; this is now done using the Taxonomy Editor.
- `.pconf.xml` configuration files are now split into `.pconf` (Configuration) and `.tconf` (Taxonomy) files.
- If you import old configuration files, they will be split into separate `.pconf` and `.tconf` files. The same occurs during migration.

Changes to the Klocwork Servers

- You must pass the `--projects_root` (or `-r`) argument to the kwservice command when specifying the location of your projects_root. In previous releases, this argument was implied when the path to your projects_root was passed as an argument.

Changes to MySQL integration with Klocwork Insight

- Use of an external MySQL server with Klocwork Insight is no longer supported.

Known limitations

Limitations for installation, upgrade and deployment

Some virus scanners may slow analysis performance

If certain virus scanners are deployed (such as Trend Micro Worry-Free Business Security 6.0), your analysis time may increase.

Workaround: If your anti-virus software permits, configure exclusion folders for the projects_root directory and the tables directory.

Interoperability between releases

Insight clients earlier than Klocwork Insight 10.0 cannot interoperate with a Klocwork Insight 10.0 Server. You must upgrade both your Server and User installations. See Upgrading from a previous version.

Only one set of Klocwork Insight 10.0 Servers can be run as Windows Services on each host

It is not possible to run two sets of the Klocwork Servers as Windows Services on one host when the servers are of the same Klocwork version.

Workaround: Start additional instances of the Klocwork Insight 10.0 servers using kwservice (and set the ports appropriately, so that there is no conflict).

Users may not be able to connect to the Klocwork Servers if Server host machine is brought out of hibernation mode

Windows only, when not running Klocwork Servers as Windows Services: Users may not be able to connect to the Klocwork Servers if the machine hosting the Klocwork Servers is brought back from hibernation mode. Restarting the Klocwork Servers does not help this problem.

Workaround: Log off the machine hosting the Klocwork servers and log in again, or restart the server host machine. Alternatively, run the Klocwork Servers as Windows Services.

Remote Klocwork clients may not be able to connect when Klocwork Servers are started on "localhost"

Linux and Solaris only: If you start the Klocwork Servers on a machine where the `/etc/hosts` file contains an alias that maps the host name to localhost address 127.0.0.x, remote Klocwork Insight clients will not be able to connect to the servers.

Workaround: Remove the alias to 127.0.0.x from `/etc/hosts` and restart the servers.

Projects_root directory cannot be located on a shared file system (NFS)

Unix only: Due to MySQL limitations, the projects_root directory should not be located on NFS. It has a special file locking implementation which is not fully supported by MySQL. See also the warning in the MySQL documentation [1].

NIC naming convention em[123...] not supported

The NIC naming convention on Fedora Core 15 is em[123...] by default, which is not supported by Insight.

Workaround: Configure NIC as eth[0123...], which is supported by Insight.

Limitations for Checker configuration migration

Note the following limitations with checker configuration files during the upgrade process (via the import process):

- Only modifications to default checker configuration files are imported. If you had a non-default checker enabled in an earlier installation and it was renamed in a new version, you will not see the checker in new builds. You must manually re-enable the checker in the new version of Insight.
- If a checker that was enabled by default was renamed in the new version of Insight, you will not see new codes until the first system build of the new installation.

Limitation for importing projects with existing reports

If you attempt to import a project with existing reports that use default metric names, you may see unexpected results.

Workaround: When importing a project, ensure that the reports do not use default metric names.

We hit StackOverflowError in MySQL driver

If you see this message in the Klocwork Server log during or after installation, it indicates that there are unclosed connections in the server's database. You may also experience a subsequent failure when importing projects from your existing server. If your import operation fails with "Too many open connections", you should restart your source server or wait an hour so that your MySQL server can evict any unclosed connections.

Support for desktop project migration of 8.x versions of Klocwork Insight has been removed

If you run kwcheck on an 8.x `.kwlp` file, your previously detected defects will not show up.

On Linux, when importing projects with large numbers of builds, make sure your ulimit value is set accordingly

If your projects contain a large number of builds, set your `ulimit` value to an appropriate number determined roughly by the following formula:

```
"ulimit -n" > max(number of builds in a project) + 1000
```

For example, if your project contains 500 or more builds and is failing during import, set your `ulimit` value to 2048.

Eclipse update site fails when downloading from a secure server

Due to an Eclipse security feature, you cannot download a plug-in from a secure server (https).

Workaround: The Klocwork Administrator must make the Eclipse update site package available to all users as an archive.

You must have the Microsoft .NET 4.0 Framework installed in order to run Windows services

This framework is installed by default as part of Windows 8. For all other versions of Windows, you must download the Microsoft .NET 4.0 Framework Installer [2] and install the framework manually.

Before downgrading to a previous version of Insight, you should uninstall the current release

To avoid duplicate entries in the Windows Control Panel, and incorrect plug-in version numbers in your IDEs, it's a good idea to uninstall the current version of Klocwork Insight before downgrading to a previous version.

Uninstall any existing Klocwork user package before installing the latest 10.X desktop analysis plug-ins

You must uninstall any existing Klocwork user package from an earlier version of the product (9.2, 9.5, or 9.6) before installing the latest version (10.X) of the desktop analysis plug-in.

During installation, you may encounter an error indicating that a previous version of the Klocwork user package is installed on your computer, even if the user package has been removed. If you see this error, verify that the existing package has been removed. If the error persists after the user package component has been removed from your computer, then you may need to re-install or repair your existing user package installation, then uninstall again.

Limitations for Mac OS X support

- Distributed Analysis is not supported.
- For developers, plug-in support is provided for Eclipse and IntelliJ IDEA. If your developers are not using Eclipse or IntelliJ IDEA, they need to use Klocwork Desktop Command Line for C/C++ or Java (kwcheck) or Klocwork Desktop to analyze their code and view detected issues. See Fixing issues before check-in with Klocwork Desktop Analysis.

Limitations related to internationalization and localization

See also:

- Localization details
- Klocwork support for non-ASCII encoding

Japanese version of Insight

The following are not localized in Insight 10.0:

- the IntelliJ IDEA plug-in (because IntelliJ IDEA does not provide a Japanese version of the IDE)
- The MISRA checker help, because MISRA does not provide a translated version

Unix, using dash: Cannot start servers on projects_root containing non-ASCII characters

When using dash (the default shell on Ubuntu), it is not possible to start the Klocwork Servers on a projects_root with Japanese characters in the path. This is due to a dash limitation related to improper handling of multibyte characters. This problem exists for Ubuntu 10.10 only.

Workaround: Use a different shell, for example bash.

Installation path cannot contain multibyte characters

If you attempt to install to a path containing multibyte characters on any platform, the installation may fail or cause unexpected results when you use the product.

Workaround: Ensure that the path to the chosen installation directory contains only ASCII characters.

Do not use non-ASCII, double-byte characters (e.g. Japanese) to specify the name of your projects_root

Using Japanese or other non-ASCII, double-byte characters to specify your projects_root will cause failures.

Workaround: Use ASCII characters to specify your projects_root.

Visual Studio cannot connect to the Klocwork server if multi-byte characters are in the host name

If your host name contains multi-byte characters (e.g. Japanese) and you attempt to connect to it in Visual Studio, you will be unable to connect to the host.

Workaround: Do not try to connect to a server that contains non-ASCII characters. Alternatively, you can use the ASCII representation of the multi-byte host name instead.

Offline product documentation may not load if double-byte characters are used to specify the hostname of the server

> In some cases, the offline help may not load correctly if you used double-byte characters to specify the hostname of your server. This may be caused by your DNS configuration settings or settings related to your browser or operating system.

> *Workaround:* Use ASCII characters to specify your hostname, check your DNS configuration settings, or use the online product documentation at www.klocwork.com [3]

Cannot set up or submit a code review if Perforce Depot or Visual Studio workspace contain Japanese characters

> *Workaround:* Use ASCII characters to specify both your P4 depot name and your Visual Studio workspace, or use a unicode enabled Perforce server.

Limitations for build integration

Must specify full path to devenv when running kwinject in 4NT shell

> Even if the Microsoft Visual Studio build command devenv is in your path, kwinject will not produce a build specification when run in a 4NT shell unless you specify the full path to the devenv tool. 4NT is a non-default command shell for Windows.

> *Workaround:* Specify the full path to devenv when running kwinject in a 4NT shell.

Limitation for support of IAR Systems C compiler

> Klocwork Insight does not process the following compiler option for the IAR Systems C compiler, icc8051:

> > *-G*. Opens standard input as source, instead of reading source from a file.

> *Workaround:* If your build uses this option, there are two alternatives:

- Ignore these compilations. The code that is being piped through standard input will not be analyzed in the Klocwork build (this is what kwinject does by default).
- Save the source code to a file and run icc8051 with the source file as input.

Cannot specify symbolic link as command when running kwinject under Cygwin

> When running kwinject under Cygwin, it is not possible to specify a symbolic link as the command argument for kwinject.

kwscm svn issue with GNOME keyring support

> When switching between 32-bit and 64-bit Java, `kwscm svn` authentication may become unstable. This is related to GNOME keyring support.

> **Workaround:** After switching Java VMs, back up your existing authentication keys, and allow the system to regenerate new ones for you:

1. $ cd ~/gnome2/keyrings/
2. $ mv login.keyring login.keyring.backup
3. $ mv default default.backup
4. $ mv default.keyring default.keyring.backup

kwgradle: the root project `build.gradle` script must be writeable

> Ensure that the `build.gradle` build file is in a location that can be written to.

Cannot load Android 4.4 (KitKat) using the default memory settings for kwloaddb, kwadmin and kwjava

> Linux users building the Android platform, specifically Kit-Kat version 4.4, may need to increase the Java heap parameters (-Xmx) for several tools. In particular `bin/kwjava`, `bin/kwloaddb`, and `bin/kwadmin`. Suggested values for building Android are `-Xmx1G` for kwloaddb and kwadmin, and

`-Xmx4G` for kwjava.

Limitations for Klocwork analysis

Limitations for C# analysis

Klocwork's C# analysis is supported only on Windows.

Writing custom checkers is not supported for C# projects.

The following features are not supported for C# integration projects:

Feature	Details
Build integration	• kwinject cannot be used to create a build specification for a C# project. Instead, use kwcsprojparser. • Build specification templates
Integration build analysis	• Metrics Note that the metrics reported for C# projects cannot be considered accurate. • Mixed-language projects (you need to create one C/C++ project and one C# project) • Parallel analysis • Incremental analysis
Klocwork Review	• "Show implementation", "Show declaration", and Source Cross-Reference • The Complexity Details and Metrics reports cannot be considered accurate • The Project Configuration report does not show lines of code, comments or total number of entities, functions/methods or classes/types • The Category Details report does not display lines of code or issue density
Distributed analysis	Distributed analysis is not supported for C#.

The following features are not supported for C# desktop analysis:

- On-the-fly analysis
- Parallel analysis
- Incremental analysis
- File-level analysis in Visual Studio (only solutions and projects can be analyzed)
- Using metric thresholds and knowledge bases

Windows Indexer or antivirus program accesses temporary MySQL files, causing table loading to fail

During the table-loading phase, MySQL makes temporary files. If Windows Indexer is running or your antivirus program is running a real-time scan, these programs may try to access your temporary MySQL files, locking them, and causing table loading to fail.

Workaround:

Create a separate directory to contain temporary MySQL files, and then:

1. Configure Windows Indexer or the antivirus software to ignore the directory.
2. Access the non-default MySQL configuration file, located at:

    `<Server_install>/config/kwmysql.ini`
3. In the `<kwmysql.ini>` file, add:

    `tmpdir=<path_to_exempt_directory>`

    Note: Backslashes should be doubled when specifying a Windows folder path. Windows example: `"C:\\temp\\exempt"`
4. Restart the Klocwork Database Server.

For projects containing JSP files, specifying a Windows UNC path to the tables directory generates error

When analyzing a project containing JSP files, if you specify a Windows UNC path to the output tables directory (for example, `\\ComputerName\SharedFolder\Resource`), you may see errors such as "No Java files were created by jsp converter". This is due to an Apache Tomcat limitation.

Workaround: Specify a non-UNC path to the tables directory (map the network share to a drive).

"Tracker" plug-in for GNOME may cause performance drop in full analysis

Unix only: Running the Tracker search tool for GNOME may significantly slow a full Klocwork analysis.

Workaround: Disable Tracker when running a Klocwork analysis.

Database loading phase may fail if using IPv6

kwadmin may generate the message "Database loading stage failed" during the database loading phase if you are using IPv6.

Workaround: Add the fully qualified host name to the database.host property. To do this:

1. Open `<projects_root>/config/admin.conf` in a text editor.
2. Add the fully qualified host name to the line beginning `database.host=`. For example:

   ```
   database.host=myserver
   ```

   should be changed to:

   ```
   database.host=myserver.klocwork.com
   ```
3. Restart the Klocwork servers.
4. Restart the Klocwork analysis.

Limitations for Klocwork Desktop Analysis

Limitations for the Visual Studio plug-in

Klocwork C/C++ compiler does not parse files compiled with /CLR option

Visual Studio 2005 and 2008 allow you to create a C++ project with files that use Microsoft's managed C++ extensions. The Klocwork C/C++ compiler (kwcc) does not parse files compiled with the /CLR option. It issues a warning that the compiler skipped parsing of these files because of the use of managed extensions. This warning is included in build summary statements that count warnings and errors.

The build specification tools kwvcprojparser and kwinject add entries for all C++ files, but they report the number of files that will be skipped during an analysis (if any), as well as the total number of files added to the build specification.

Limitations for the Eclipse plug-ins

Toolbar on Klocwork Insight views doesn't display properly on 64-bit Ubuntu

Versions of 64-bit Eclipse previous to 3.5.3 may not display tools such as *Configure filters* on Klocwork Insight views on Ubuntu.

Workaround: Close and re-open Eclipse.

Eclipse 3.6.0 with LDAP crashes if Reviewers field is clicked after selecting a reviewer name

When using LDAP access control: If you type a partial user name in the Reviewers edit box in the **Create Code Review** dialog, the matches are displayed in a box. If you then select a user from that list with a single click and proceed to click the Reviewers edit box, Eclipse will crash.

Workaround: Upgrade to Eclipse 3.6.1 or later to solve this issue, or use the arrow keys and Enter to select a reviewer.

Limitations for the IntelliJ IDEA plug-in

IntelliJ IDEA plug-in not available in Japanese

IntelliJ IDEA is not localized for Japanese, so the Insight plug-in for IntelliJ IDEA is not available in Japanese. Likewise, the Japanese documentation is not available from the IntelliJ IDEA plug-in.

Workaround: To access the Japanese documentation, go to http(s)://<klocwork_server_host>:<klocwork_server_port>/, select **ja** in the drop-down menu, open Klocwork Review and click **Help**. Or use the Japanese Documentation Wiki [4].

Cannot access issue help from IntelliJ IDEA 11.1.1 or 11.1.2

Issue help for IntelliJ IDEA 11.1.1 and 11.1.2 cannot be accessed by right-clicking an issue in the issue list and selecting **Show help** or by pressing F1.

Workaround: IDEA bug that blocks access to third-party plug-in help, such as that provided by Klocwork Insight, has been fixed by JetBrains in version 11.1.3, details available at http://youtrack.jetbrains.com/issue/IDEA-87389.Previous versions of IntelliJ IDEA appear unaffected.

Klocwork icons may not appear on menu bars in IntelliJ IDEA 12

In IntelliJ IDEA 12, depending on the version of JDK installed on your system, icons may not appear on the menu bar. This is a known IntelliJ IDEA issue.

Workaround: Install the latest version of the Java JDK.

Limitations for Klocwork Desktop

Project name not saved when using non-default location

When creating a project in a non-default location, the project name is not saved.

Workaround: Repeat your project name in the *Project Location* field.

Limitations for Klocwork Extensibility

C/C++ Path checker compilation makefile compatibility

The makefile generated by kwcreatechecker on Unix systems requires GNU make to build the checker. The default make installed on non-GNU systems such as AIX or Solaris may not compile Klocwork extensions for C/C++. On Windows, the makefile generated by kwcreatechecker requires nmake to build the checker.

Workaround: None.

Checker Studio cannot represent non-standard header files

Errors will be printed in the Output window of Checker Studio when the AST is generated for source code that contains non-standard header files.

Workaround: Use self-contained examples that do not rely on external includes in Checker Studio.

Analysis fails if Java KAST custom checker was built using a version 1.7 JDK

If you use JDK version to build custom Java KAST checkers, the Insight analysis will fail during the `kwjava` phase:

```
Tue Jan 10 11:19:54 EST 2012: Running Java compilation stage...
Error occurred during build: kwjava returned 1
```

Workaround: Build Java KAST checkers using JDK version 1.6.

Limitations for Klocwork Review

Multi-word entity search highlighting not supported

Entity highlighting in the Source Viewer works only for single words.

Workaround: None.

Issue status change history difficult to view if user name is very long

If a user's name is very long, the status change history dialog spills outside the browser window.

Workaround: None.

Header Analysis in Klocwork Review no longer supported

Klocwork Insight 9.2 was the last release in which Header Analysis was supported. With the introduction of Header Analysis refactoring in Eclipse, our focus is switching from reporting Header Analysis problems to preventing them. For more information, see Klocwork Refactoring.

Internet Explorer cannot list project names if Klocwork Server host name contains underscore

Klocwork Review uses cookies to handle session authentication. Internet Explorer will not save cookies for domains containing an underscore.

Workaround:

There are three options:

- Change the Klocwork Server domain name to use only alphanumeric characters
- Have Internet Explorer users open Klocwork Review using the IP address of the Klocwork Server
- Create a domain alias for Internet Explorer users

Klocwork Review and Klocwork Cahoots user names are case sensitive

If the Klocwork Server is running on a **Windows** machine, users who log in to Klocwork Review and Klocwork Cahoots have a license checked out using the lowercase form of their user name. Other tools will not change the case of the user name (obtained from the OS), so a second license is checked out.

Workaround: Use a lowercase user name.

If the Klocwork Server is running on a **non-Windows** machine, users who log in to Klocwork Review and Klocwork Cahoots have a license checked out using the case as entered in the Login dialog. As above, other Klocwork tools use the user name as obtained from the OS.

Workaround: Match the user name case used by your OS.

Cannot use the *Remember me* option on a server with multiple server instances

If you are running multiple server instances on the same server (for example, klocwork.example.com:8080 and klocwork.example.com:8072) and log in to each server with different credentials (for example, you use jsmith to log into the server on port 8080 and jdoe to log into the server on port 8072), the "Remember me" feature does not work properly. The authentication key is stored in a browser cookie and can only be stored for a domain (the port cannot be specified).

Workaround:

There are two options:

- For the first server, access the site using the normal domain name (for example, jdoe1.klocwork.com:8080); on the second, use the IP address of the Klocwork Server instead of the domain name (for example, 10.0.145.7:8070).
- Set up a domain alias for the second server (either locally via your hosts file, or by setting it up globally).

Can't edit custom folder names for Klocwork Review reports

If you create a report and put it in a new folder, there is no way to rename that folder later.

Workaround: If there is a single report in that folder, click **edit** for the report and change the folder name. If there are multiple reports in the same folder, repeat this for each report until they have all moved to the new folder. Once they have all been moved, the old folder will disappear from the list.

Can't search for Severities in Klocwork Review

If your saved searches for severities appear in the wrong language, the search will not display the expected results.

Workaround: Log in to Review with the locale used during the project build and your saved searches will update to the correct language. Searching for severities will now work as expected.

Middle-clicking a link doesn't open it in a new tab when using Google Chrome

Due to a bug in Google Chrome, some links do not open in a new tab when they are middle clicked, shift-clicked or ctrl-clicked after the first time the link is opened in this manner. Each successive attempt simply opens the link within the active tab. For more information, see http://code.google.com/p/chromium/issues/detail?id=177502

Workaround: Refresh the page and this will allow you to open the link in a new tab the first time you attempt it.

JVM argument passing limitation (Windows only)

On Windows, when you specify a command line argument to a Java application that ends with \" (back-slash+double-quote), the JVM strips both the backslash and the quote from the argument. For example, specifying -r "myname\,othername\" will result in 'myname\' and 'othername' being added as reviewers instead of 'othername\' as expected.

Workarounds:

- wrap each name with single quotes or,
- escape the last backslash. For example:

```
-r "othername\"
```

becomes:

```
-r "othername\\"
```

This is a Windows JVM known issue.

Import status may not be accurately reflected in the Projects view

During the import process, while projects are actively being imported, issue information in the **Projects** view may not accurately reflect the data in the source project. Information in the **Projects** view will be updated as soon as the import operation has completed.

Limitations for user documentation

Documentation for C/C++ custom Path checkers

Documentation for custom C/C++ Path checkers is not provided on this site. If you think you need to create a custom Path checker for C/C++, please contact Klocwork Customer Support [2] so that we can guide you in the creation process and provide documentation.

Some links in online help return a "Cannot display the web page" error if not connected to internet

In Eclipse, Visual Studio, and Klocwork Desktop, if you are not connected to the internet, clicking on some links in the online help will return a "Cannot display the web page" error. To reduce the size of the online help file, not all help pages are packaged with these tools.

Workaround: Connect to the internet to view these pages in the Documentation Wiki.

Must enable cookies in Internet Explorer to log in to Documentation Wiki from Eclipse plug-in or Klocwork Desktop on Windows

Windows only: If you do not have cookies enabled in Internet Explorer, you will not be able to log in to the Documentation Wiki from the plug-in for Eclipse or from Klocwork Desktop. Note that login is required only for editing pages on the Doc Wiki.

Workaround: Because Eclipse and Klocwork Desktop use Internet Explorer for help browsing, you need to enable cookies in Internet Explorer.

URLs to external sites don't work in the help for IntelliJ IDEA

It's not possible to navigate to external URLs from the help in IntelliJ IDEA.

Workaround: Use the Documentation Wiki at http://www.klocwork.com/products/documentation/current/ to navigate to these pages.

PDF links don't work in the help for IntelliJ IDEA

If you click a link to a PDF in the help for IntelliJ IDEA, the file name displays as a title in the right pane, but there's no text. This is an issue for users trying to access the C/C++ extensibility reference manuals.

Workaround: You can access the Klocwork C/C++ AST API Reference and Klocwork C/C++ Path API Reference PDFs from the Reference page [5] on the Documentation Wiki.

Help links for detected issues don't work in IntelliJ IDEA 11.1

If you click **Show help** for a selected issue in IntelliJ IDEA 11.1, an error is shown.

Workaround: Use the Documentation Wiki at http://www.klocwork.com/products/documentation/current/ to find the help for the issue.

Links to klocwork.com cannot be opened in the Eclipse help browser

If you click a link in the Eclipse help documentation that references www.klocwork.com, a warning message will appear in the right pane of the Eclipse help browser indicating that this link cannot be opened within the current window. The user can then click the link in the message to spawn the topic in a separate window.

References

[1] http://dev.mysql.com/doc/refman/5.0/en/innodb-restrictions.html
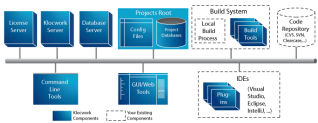
[2] http://www.microsoft.com/en-us/download/details.aspx?id=17718

[3] http://www.klocwork.com/products/documentation/Insight-10.0/Klocwork_Insight_Documentation

[4] http://www.klocwork.com/products/documentation/Insight-10.0-ja/

[5] http://www.klocwork.com/products/documentation/current/Reference

About the Klocwork packages and components

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

The Klocwork Insight installation packages and components allow you to install only the components you need on a specific machine.

Note: The Distributed Analysis package is covered separately in Installing the Distributed Analysis package.

Server package components

Component	Details
License Server	A FLEXlm license manager (command-line name: license). You can also use your organization's FLEXlm server. Default host: localhost Default port: 27000 plus 33133
Klocwork Server	An Apache Tomcat Web server (command-line name: klocwork). Provides access to Klocwork Review, Klocwork Cahoots and Klocwork documentation. Klocwork clients connect to the Klocwork Server for project information. **Note:** Klocwork does not support using your own Apache Tomcat server. You must use the Web server packaged with Klocwork. Default host: localhost Default port: 8080 plus 8081 The Klocwork Server component now contains the Klocwork Database. Default host: localhost Default port: 3306
Klocwork build tools	Integration build analysis tools: • tools for managing Klocwork projects, analysis and access control (kwadmin and kwbuildproject) • tools to produce a build specification (kwinject, kwwrap, kwant, kwcsprojparser) • tools for running Klocwork integration build analysis (the analysis engines) • tools for managing Klocwork projects and access control • sample projects
Klocwork projects_root directory	The data location for the Klocwork Servers and applications, including the project database tables, which are stored in MySQL and Lucene databases. For information about default location and special considerations for this data directory, see Projects_root directory. **Note:** The projects_root directory is not one of the components you see listed in the installation wizard, but the wizard lets you choose a location for it.

Desktop analysis components

Component	Details
Klocwork command line	Command-line versions of the Klocwork developer tools for C/C++ and Java, which allow software developers to verify the quality of source code before they commit it to source control. Also includes Klocwork Desktop, a GUI alternative to running kwcheck. **Note:** This component also includes the Klocwork Extensibility API for writing custom checkers.
Klocwork Desktop plug-in for Visual Studio	The Klocwork desktop analysis plug-in for integration with Microsoft Visual Studio. Supports Visual Studio versions 2005, 2008, 2010 and 2012.
Klocwork Desktop plug-in for Eclipse	The Klocwork desktop analysis plug-in for Eclipse and Eclipse-based IDEs.
Klocwork Desktop plug-in for IntelliJ IDEA	The Klocwork desktop analysis plug-in for IntelliJ IDEA.

Note: Once deployed, users can download the desktop plug-in installers from the main page of the Insight portal. Each binary has the following naming format:

```
kw-insight-IDE-installer.platform.exe
```

See Installing a desktop analysis plug-in for details on installing the desktop analysis plug-ins.

Upgrading from a previous version

Upgrading from a previous version

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> For Insight 10.0, we've created a new and simple way to import your existing Klocwork Insight projects into a new projects_roots directory. You can use the Klocwork Insight portal GUI to connect to your existing Klocwork server then choose which projects you'd like to import. If you're a Klocwork Cahoots user, you can also connect to your existing Cahoots server to import your Klocwork Cahoots code reviews to Insight. The GUI enables a quick and painless migration to the very latest version of Klocwork Insight.

We realize that no two installations are the same, and depending on your installation, you may choose to migrate your projects root directory in its entirety. This method is still supported. Both methods are described in detail below:

Import your existing projects

Insight now includes a simple GUI that you can use to import projects from an existing projects_root to your new Klocwork installation. This allows you to migrate your data on a project by project basis without using the command line, and without the need to validate your database.

Before you decide to import your projects, make sure that your current installation supports this feature. See Import your existing projects into a new projects_root for more information about upgrade paths.

Note: This is the preferred upgrade method.

Typically, this process involves the following steps:

- backing up your existing projects_root (just to be safe),
- installing the new Klocwork Insight Server (either on a new machine or using a different port number),
- starting the new server, opening the portal, and using the GUI to import existing projects to the new installation, and
- after testing your new installation, uninstalling the existing server and projects_root.

See Import your existing projects into a new projects_root to get started importing your existing projects.

Migrate your projects_root

You can migrate your projects_root and configuration settings over to your new Insight installation by using the `kwservice --migrate` command. Typically, this process involves:

- Stopping your server and backing up your existing projects root folder and configuration settings,
- installing the new Klocwork server package by specifying the existing projects root folder, server and port settings,
- revalidating your database and,
- testing your installation.

Note: Migration of your projects_root folder is only supported as part of the upgrade from Insight 9.6. If you're upgrading from an earlier version of Insight, see Import your existing projects into a new projects root.

See Migrate your projects_root directory for more information about migrating from an earlier release.

Import your existing projects into a new projects root

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Before you begin

IMPORTANT NOTICES

The import process involves running your existing Insight installation (and projects_root) and your new Insight installation (with clean projects_root) concurrently. Once you've installed the new server, you must import any projects from the existing projects_root into the clean projects_root.

Remember that you cannot run two Klocwork servers on the same machine without specifying unique port numbers. If you plan on installing the new Klocwork installation on the same machine, it's a good idea to stop and restart your existing server using a different port number. This will allow you to maintain the existing port number for you new installation.

Both the Klocwork and Database servers require fully qualified domain names or IP addresses assigned in order to be accessible from the target server host during the import process.

Note: You must have local projects_root administrator access in order to perform the import operation.

Supported upgrade paths to versions of Insight that support project import

You can import your projects from any version of 9.5 as well as the most recent service releases of 9.2 and 9.6 are supported. If you are upgrading from release 9.0 or 9.1, you need to follow the appropriate upgrade path to upgrade to 9.2 SR3, or any of the versions described in the table below.

Find your current version in the chart below and follow the appropriate upgrade path. Once you've upgraded to the correct version of Insight, you can import your existing projects from there. If you are upgrading from a release earlier than 9.0, contact Customer Support [2] for further instructions.

If you're using Insight version	Apply this service release
9.2	9.2 SR3
9.5	any service release
9.6	9.6 SR5 or 9.6-SR6

Once you've upgraded to a supported service release or version, you can install the latest version of Klocwork Insight, then use it to connect to your existing server to import your existing projects. Follow the steps described below to import your projects.

Install the Insight Server package

Install the version 10.0 Server package. For instructions, see:

- Installing the Klocwork Server package on Windows
- Installing the Klocwork Server package on Unix
- Installing the Klocwork Server package on Mac

Be sure to copy your license file to `<projects_root>/licenses`.

Note: See Customizing licensing for information on licensing options.

Start the server

Once you've installed the new version of Insight, start the server being sure to specify a unique hostname and port number.

You can specify the hostname and port number either at startup, or during the installation process. See, Starting the Klocwork Servers for more information.

Import your projects and server settings

With the new Klocwork server installed and the portal up and running, you can import server settings and projects from your existing Insight installation.

When you import server settings from the existing source server, all global permission settings are imported along with the permission settings for only those projects that exist on the destination server. In other words, if you import Server A's settings to Server B, then you import a project from Server A to Server B, any permission settings that are specific to project A will not be carried over to Server B. To carry forward project A's project-specific permission settings, you must re-import the server settings after performing the import operation.

Important: In cases where a project contains custom settings, you must re-import your server settings after performing a project import.

To import your existing projects:

1. In the Klocwork Product Portal, click *Insight* and log in to the product.
2. Click the *Projects' tab.*

    If this is your first time using the installation, click the **Import settings or projects** button.

    If you've already created a project or imported a project, click the **Import** button.

3. In the *Klocwork server connection* dialog, specify the log in and connection information for your existing Insight installation (the installation from which you want to import). Specify:

    1. the URL of the existing server, for example: http://server21:8082,
    2. your user name. **Note:** you must have projects_root administrator rights in order connect to the server and import your projects,
    3. your password (if required).

4. *Optional:* Click **Import server configuration** to import the existing server's configuration settings. This includes authentication configuration settings, permissions, custom metrics, reports definitions and e-mail subscription settings.
5. Click **List Projects** to see a list of projects in your existing projects_root.
6. In the **Choose projects to import** dialog, select the project(s) that you want to import to your new projects_root.
7. Click **Import**. The *Import status* dialog will display the status of the project import, while an import status message will appear at the top of the Projects tab.Any project that imported successfully will appear in your projects list.

8. Click **Import server configuration** again to import any project-specific configuration settings. This is a mandatory step, since any project-specific configuration settings will be lost if you do not re-import the server settings.
9. For each imported project, click **Permissions** and check that the permissions are correct for each project.

> **Note:** During the import process, while projects are actively being imported, issue information in the Projects view may not accurately reflect the data in the source project. Information in the Projects view will be updated as soon as the import operation has completed. Check the import status indicator for progress information.

It is important to verify the permissions for each project since at import time, permissions are merged between source server and destination server. You should repeat this process after each import operation, and you must be careful to re-import the server settings for each source server that you import from.

Use the Web API to import your projects

You can use the Klocwork Web API to import your projects on the command line. The following example shows a curl script to import a given project:

```
curl --data
"action=import_project&user=myself&project=my_project&sourceURL=http://oldserver:8080&sou
 http://localhost.klocwork.com:8080/review/api
```

where:

- *project* is the name of the project you want to import,
- *sourceURL* is the URL of the existing, source Klocwork Server,
- *sourceAdmin* is the user id of the source Klocwork Server administrator (must have projects_root admin access),
- *sourcePassword* is the administrator's password.

To return a list of all projects in the source projects_root folder, run the following command:

```
curl --data "action=projects&user=myself&" http://localhost.klocwork.com:8080/review/api
```

You can also use the Web API to import your server configuration settings:

```
curl --data
"action=import_server_configuration&user=myself&sourceURL=http://oldserver:8080&sourceAdm
 http://localhost.klocwork.com:8080/review/api
```

Typically these operations are scripted using a language such as Python or Perl. See the Klocwork Insight Web API cookbook for examples of scripted curl calls using Python.

Import your code reviews

You can import your existing Klocwork Inspect or Klocwork Cahoots code reviews into your new projects root.

To import your existing Klocwork Inspect code reviews:

Note: Before importing code review data, you must have the equivalent project in your local projects root. Importing code review data will overwrite any existing code review data in the current projects_root folder.

1. In the Insight Product Portal, click **Cahoots**.
2. Click **Settings**, then in the left pane, click **Import**.
3. Click **Import code reviews**, then specify the URL of the source Klocwork server, the user ID of the Klocwork administrator for the source projects root, and the password (if required).

4. Select the projects that you want to import, then click **Import**.

To import your existing Klocwork Cahoots code reviews:

Note: Klocwork Cahoots does not organize code reviews by project. When you import existing code reviews from your Cahoots server, you must specify the code reviews by tag.

1. In the Insight Product Portal, click **Cahoots**.
2. Click **Settings**, then in the left pane, click **Import**.
3. Click **Import code reviews**, then specify the URL of the source Klocwork Cahoots server, the user ID of the Klocwork administrator for the source projects root, and the password (if required).
4. Select the local project into which you want to import the code reviews.
5. In the left pane, select the tags that you want to import.
6. Click **Assign** to assign the tags to the selected project.
7. Click **Import** to import the code reviews.

Test your upgrade

Ensure that you can see your projects and builds in Klocwork Review.

If you installed a new license file, ensure that it was installed correctly by checking that the number of licenses is correct.

Go live with your new installation

Once you're satisfied that your new installation is valid, and that your existing projects were imported correctly, it's time to go live with your new installation.

If you've chosen a new and unique port number for your new installation, then you can go ahead and communicate that information to your users.

If you'd like to reuse your existing port number (so that users don't have to update their local settings) then you'll need to stop and restart all of your Klocwork servers, taking care to specify the existing server port number for your new installation.

Upgrade all Desktop Analysis plug-ins

Ensure that all Klocwork plug-ins are upgraded to Insight 10.0. Klocwork Desktop Analysis plug-ins earlier than Insight 10.0 cannot interoperate with an Insight 10.0 Server.

Your users can reinstall their Klocwork Desktop Analysis plug-ins themselves by downloading the appropriate plug-ins from the Klocwork portal once it is up and running. See Installing a desktop analysis plug-in for instructions.

Migrate your projects root directory

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Before you begin

IMPORTANT NOTICES

To reduce the amount of time required for migration, we **strongly recommend that you delete unneeded projects and failed builds before migration**, as detailed in the procedure that follows.

We also recommend that you **make a copy of your projects_root directory** and migrate the copy. This way, users can continue to use Klocwork Review, though they should be instructed not to make any changes, such as changing an issue's status.

If you do not use the default server settings, you will **need to specify your custom settings prior to beginning the upgrade**. Otherwise, during the installation these settings will revert back to the default settings. If you forget, you can always go in and change the settings for each of your environments after you have completed upgrading.

To avoid losing issues, status changes or comments from the last release in your first release 10.0 analysis run, make sure you read Before your first 10.0 integration build analysis.

See also:

- Changes affecting migration
- Licensing changes
- Limitations for installation, upgrade and deployment

Supported upgrade paths

You can only use the migrate utility to upgrade from the last version of the product. To upgrade from earlier versions of the product, use the import method. See Import your existing projects into a new projects_root for more information.

If you're using Insight version	Then follow this upgrade path
9.6	9.6 any release --> 10.0 GA or any SR.x

Interoperability between releases

Clients earlier than Klocwork Insight 10.0 cannot interoperate with a Klocwork Insight 10.0 Server. You must upgrade both your Server and Desktop Analysis plug-in installations to Klocwork Insight 10.0.

Running two versions of the Klocwork Servers

If you will be running two sets of the Klocwork Servers, for example to test the Klocwork Insight 10.0 Servers while users continue to access your existing servers, you must run them on different projects_root directories (and set the ports appropriately).

Handling licensing when using versions 9.x and 10.x

Versions 9.x and 10.x of Insight use two different license versions. However, it is possible to run both 9.x and 10.x simultaneously. There are three scenarios in which you would want to run both versions:

If you want to...	Then...
Set up a separate projects_root to test the new version	Install Insight 10.0 in a new location and copy your new license file to the `<projects_root>/licenses` directory in the new installation. Run a License Server for each installation.
Upgrade your existing projects_root	Append the contents of your new license file to the 9.x license file. Run only the License Server from the 9.x installation. You can specify that version 10.0 should use the previous License Server in one of two ways: • During installation, by specifying the appropriate host and port in the wizard or with the installation script. See Installing Klocwork Insight. • After installation, with `kwservice set-service-property`. See Viewing and changing Klocwork server settings.
Run separate production projects_roots for each version (for example, if one group is upgrading but another group needs to continue using version 9.x)	Install Insight 10.0 in a new location and copy your new license file to the `<projects_root>/licenses` directory in the new installation. Run a License Server for each installation.

Note: If you will use your organization's FLEXlm license server rather than the license server packaged with Klocwork Insight, you must configure Insight and the FLEXlm license server to work together, and you must put your Klocwork license file in the right place. See Using your organization's FLEXlm server.

Prepare to upgrade

For details on starting and stopping the servers, see Starting the Klocwork Servers and Stopping the Klocwork Servers.

To prepare to upgrade:

1. For the projects_root you wish to migrate, run:

```
kwservice --projects-root <projects_root> check
```

2. Make note of what servers are running and what ports they are running on. After migration to the new version of Klocwork Insight, the servers will be running on these ports.
3. Stop the servers.
4. To create a restore point, perform a complete backup of any projects_root directories you want to migrate. After you upgrade Klocwork Insight, you cannot undo the upgrade. For information, see Backing up Klocwork data.
5. If you customized any configuration files (such as `kwmysql.ini` or `kwfilter.conf`), back up the `<server_install>/config` directory.
6. Start the servers.
7. **IMPORTANT:** To reduce the time required to migrate your Klocwork data, Klocwork **strongly recommends** that you:
   • Delete any projects from the previous version that you do not need to migrate. See kwadmin delete-project.
   • Delete any failed project builds from the previous version. You cannot resume a build that failed in a previous release after migrating the project as described in this article. However, you may be able to load the build from tables. See kwadmin delete-build.
8. Stop the servers.
9. (Optional) To create a second restore point, back up the projects_root directories you have prepared for migration.
10. Store the existing Klocwork license in a safe place.

11. To prevent confusion, delete the old Klocwork logs from `<projects_root>/logs`.

Install the Insight Server package

Install the version 10.0 Server package. For instructions, see:

- Installing the Klocwork Server package on Windows -- Upgrade only
- Installing the Klocwork Server package on Unix -- Upgrade only
- Installing the Klocwork Server package on Mac -- Upgrade only

Validate your database (mandatory)

dbvalidate is a tool that checks the consistency of data in your database. It works on Insight versions 8.2 and later. Running this tool is mandatory, so that any errors in your database can be corrected *before* you migrate.

Note: The Database Server from your old installation must be running to validate the database.

Run the following command:

```
java -jar <10.0_server_install>/class/dbvalidate.jar --projects-root <projects_root>
```

where

- <10.0_server_install> is your new installation directory
- <projects_root> specifies the location of the old projects root you want to migrate

Example

```
java -jar C:/Klocwork/Server 10.0/class/dbvalidate.jar --projects-root C:\Klocwork\projects_root
```

dbvalidate will report any errors between the "validation started" and "validation finished" lines:

```
Wed Jun 01 07:53:58 CDT 2011 kw_central database (version: 95) validation started
<detected errors appear here>
Wed Jun 01 07:54:28 CDT 2011 Database validation finished.
```

- If **Errors** are displayed, contact Klocwork Customer Support [2], so that we can correct the error prior to migration.
- If no errors are displayed, your database was successfully validated.

Put your new license in the correct directory

If you received a new license file from Customer Support, copy it to `<projects_root>/licenses`.

Note: See Customizing licensing for information on licensing options.

Migrate your Klocwork data

To migrate a projects_root, run the following command from `<Klocwork_10.0_Server_install>/bin`:

```
kwservice --projects-root <old_projects_root> start --migrate
```

If the projects_root migrates successfully, the Klocwork Servers start on the port numbers picked up from the migrated projects_root.

Notes:

- If you will be running the Klocwork Servers as Windows services, after starting the servers with the *--migrate* option, stop the servers with `kwservice --projects-root <migrated_projects_root> stop`.

Then start the Insight 10.0 services in Windows Services Administration.

- You can manage the Klocwork servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands locally.
- The above command converts all external configuration files in the projects_root to UTF-8. As of Klocwork Insight 8.1, all external configuration files must be UTF-8 encoded if they contain multibyte characters (for example, Japanese). External configuration files are those listed in Configuration files you can edit.

If you customized configuration or metrics files

- **If you modified the MySQL configuration file** located at

  `<old_Klocwork_install>/config/kwmysql.ini`

  Make the same changes to `kwmysql.ini` in the new installation.

  Note: The following fields are no longer supported with the version of MySQL used with Insight 9.2 and later. If your previous `kwmysql.ini` file contains these fields, do not copy these lines to the new file:

  `skip-bdb`

  `myisam_max_extra_sort_file_size`

  Important: Do not copy your customized configuration files into the new Insight installation. Instead, make the same customizations to the newly installed configuration files.

- If you modified the compiler mapping file located at

  `<old_Klocwork_install>/config/kwfilter.conf`

  Make the same changes to `kwfilter.conf` in the new installation.

  Important: Do not copy your customized configuration files into the new Insight installation. Instead, make the same customizations to the newly installed configuration files.

- The following files are obsolete as of Insight 9.5 and do not need to be migrated:
  - the compiler configuration file (`kwcc_config.xml`)

    See kwinject error - Compiler can't be configured for more information.
  - compiler filter files (`<compiler_name>_filter.xml`)

    You may need to contact Customer Support to replace your `*_filter.xml` file with a Python script. See Adding an unsupported C/C++ compiler for details.

- **If you added custom metrics reports to Klocwork Review**, you need to edit the custom metrics report configuration file (metrics.xml). Prior to Klocwork Insight 9.0, the metrics.xml file was located at:

  `<server_install>/webapps/review/reporting/config`

- As of Klocwork Insight 9.0, the metrics.xml file is located at:

  `<projects root>/config`

Notes

- As of Klocwork Insight 9.0, the metrics.xml file applies to a projects_root directory, not to an entire Klocwork installation. Therefore, if you have multiple projects_root directories, you will need to copy your customized metrics.xml file to each of your projects_roots.
- As of Klocwork Insight 9.0, you need to restart the Klocwork Server after customizing the metrics.xml file.

See Customizing metrics reports in Klocwork Review.

Test your upgrade

Ensure that you can see your projects and builds in Klocwork Review.

If you installed a new license file, ensure that it was installed correctly by checking that the number of licenses is correct.

Upgrade all Desktop Analysis plug-ins

Ensure that all Klocwork plug-ins are upgraded to Insight 10.0. Klocwork Desktop Analysis plug-ins earlier than Insight 10.0 cannot interoperate with an Insight 10.0 Server.

Your users can reinstall their Klocwork Desktop Analysis plug-ins themselves by downloading the appropriate plug-ins from the Klocwork portal once it is up and running. See Installing a desktop analysis plug-in for instructions.

Repeat upgrade steps on other projects_root directories

To migrate another projects_root, carry out the steps in this chapter again (except for installing Klocwork).

Summary of upgrade steps for second or later projects_root directory:

1. Prepare to upgrade.
2. Run:

```
kwservice --projects-root <projects_root> start --migrate
```

3. Re-create any compiler configuration files you had customized.
4. If you added custom metrics reports to Klocwork Review, edit the custom metrics report configuration file (metrics.xml).
5. Test your upgrade.

Before your first version 10.0 integration build analysis

New releases of Insight normally have changes to the checker configuration to keep up with current events and respond to customer requests. These changes may mean that your checker configuration from the previous release isn't the same in the new release.

Make sure that you have the right checkers enabled to match your old configuration. See What's New for a list of updated checkers, then make any changes to your checker configuration. After you're satisfied with your configuration, perform your first version 10.0 integration build analysis on unmodified source code.

Note: If you've already run your first 10.0 analysis and you're missing some issues or status changes, delete that build, reconfigure your checkers, and run a new analysis.

We recommend running your final pre-upgrade integration build analysis and your first version 10.0 analysis on identical source code, and then comparing the two builds. This allows you to assess changes in the analysis engine. For details on improved, added and removed checkers in this version, see What's New.

Installing the Klocwork Server package on Windows -- Upgrade only

<yambe:breadcrumb>Upgrading from a previous version|Upgrading</yambe:breadcrumb>This page provides instructions for installing the Server package if you are upgrading.

IMPORTANT: This is not the starting point for upgrading. Make sure you start with Upgrading from a previous version.

Before you begin

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

Required permissions

- Administrator access is required to install all Windows packages, whether using the installation wizard or unattended installation.
- You must have administrator access to install the Klocwork Server.
- You must have administrator permissions to start the Klocwork Servers (and to run the Klocwork Servers as Windows Services).
- For Windows Server 2008, you must use the 'Run As Administrator' option in order to launch any Klocwork tools which access a projects_root that is located on a root directory.

Run the installation wizard

Run the Klocwork Server installation wizard, following the prompts. Note the following:

- The installation package will automatically detect whether you have a 32-bit or 64-bit operating system and will install the appropriate version of Java.
- If your system locale is Japanese, the installation package runs in Japanese. Otherwise, it runs in English.
- **Caution:** Do not install the Server package and the projects_root in the Program Files directory. Default security settings for Windows 7 and Windows Server 2008 restrict writing to files in the Program Files directory.
- For information on the *Use secure server connection (HTTPS)* checkbox, see Using a secure Klocwork Server connection.
- When prompted for the location of the projects_root directory, specify the **old** projects_root directory that you want to migrate.
- You do not need to set host names and port numbers for the Klocwork Servers during installation. This information will be picked up from your old projects_root directory when it is migrated.
- Do not select the option to start the Klocwork Servers as Windows services automatically. You will start the servers in a later step.
- The Klocwork bin directory (`<server_install>\bin`) is automatically added to your System Path environment variable.

Log files

An installation log file is saved to the Temp directory of Local Settings whenever one of the Klocwork installation packages is started on Windows. For example, on Windows 7, the installation log file is saved to `\Users\<user>\AppData\Local\Temp`.

These log files are named `Klocwork<release_number>-<package>.log`. For example, the installation log file for the Klocwork 10.0 Server package is named `Klocwork10.0-Server.log`.

A `logs` directory is also created in the root Klocwork installation directory during installation. For the Server installer, for example, the log files in this directory store kwservice output when the servers are first started and the projects_root directory is initialized.

What's next?

Now it's time to validate your database.

References

[1] http://developer.klocwork.com/support/public

Installing the Klocwork Server package on Unix -- Upgrade only

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> This page provides instructions for installing the Server package if you are upgrading.

IMPORTANT: This is not the starting point for upgrading. Make sure you start with Upgrading from a previous version.

Before you begin

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

Installation notes

- **Linux only:** There are separate installation packages for 32-bit and 64-bit Java. Make sure you select the one that matches your operating system.
- `ulimit -n` must be 2048 in order to run the Klocwork Server.
- Ensure that the downloaded .sh file is executable. Use the chmod command to set the appropriate permissions: `chmod 755 <kw-installer.sh>`
- To control permissions when you are installing Klocwork, change the value of umask.
- Install Klocwork software as a non-root user.
- Ensure that the path in which you install the product is the same path from which users invoke the product. For example, the local path to the installation might be `/local/tools/klocwork`, but users on other machines have to use the NFS path `/opt/tools/klocwork` to invoke the product. Therefore, to ensure that users can invoke the product, use the `/opt/tools/klocwork` path during installation.
- **Important:** Due to MySQL limitations, the projects_root directory should not be located on NFS. It has a special file locking implementation which is not fully supported by MySQL. See also the warning in the MySQL documentation [1].

Run the installation package

Run the following command:

```
kw-server-installer-10.0.x.x.<platform>.sh -p <projects_root> [options] <install_directory> [component ...]
```

where

- <platform> is `solaris`, `linux` or `aix`
- <projects_root> is the location of the **old** projects_root directory that you want to migrate
- [<options>] are any of the options listed in Command-line options for the Server package

    Note: You do not need to set host names and port numbers for the Klocwork Servers during installation. This information will be picked up from your old projects_root directory when it is migrated.
- <install_directory> specifies the directory in which you want to install Klocwork. Do not specify a subdirectory of the projects_root directory. Note that if the chosen directory is not empty, you will not be able to continue with the installation.
- [<component ...>] is any of the arguments from Arguments for Server components. Separate multiple components with spaces. If you do not specify one or more components, the entire package will be installed. You can also see a list of arguments for the various components with the *--list* option. Note that an asterisk in the returned output means the component is already installed.

Example

```
kw-server-installer-10.0.0.0.linux.sh -p /space/old_projects_root /opt/klocwork
```

Command-line options for the Server package

Name	Short name	Description
--agree	-a	Agree to license terms and do not display license agreement.
--database-port <port_number>		Specify the port number that you will use to run the Database Server. Default: 3306. This option is equivalent to specifying the port number with kwservice.
--debug		Print debug information
--force	-f	Install without integrity checks
--help	-h	Display this help and exit
--klocwork-port <port_number>		Specify the port number that you will use to run the Klocwork Server. Default: 8080. This option is equivalent to specifying the port number with kwservice.
--license-port <port_number>		Specify that the License Server will be run locally, but on a non-default port. Default: 27000. This option is equivalent to specifying the port number with kwservice.
--license-server <host>[:<port>]		Specify a remote License Server host. The host argument is required; the port argument is optional. Default: localhost:27000. This option is equivalent to specifying the host and port with kwservice. See also Using your organization's FLEXlm server.
--list	-l	List available features (components)

--projects-root <directory>	-p	Specify the complete path to a non-default projects_root directory. Default: `<install_directory>/projects_root.`
		The directory you specify must meet one of the following conditions:
		• it does not yet exist
		• it is empty
		• it is a valid projects_root directory created previously
		Do not specify the same directory as the root Klocwork installation directory you have specified. Do not install Klocwork in a subdirectory of the projects_root directory.
		IMPORTANT: If you are upgrading, specify the **old** projects_root directory that you want to migrate.
--use-ssl		use a secure Klocwork server connection (HTTPS)
--version	-v	display the version of Klocwork software and exit

Arguments for Server components

To install this Server component (feature)...	...enter the argument...
License Server	LicenseServer
Klocwork Server	KlocworkServer
Administration and analysis management tools	BuildTools

Add Klocwork to your PATH

On Unix, we recommend adding `<klocwork_install>/bin` to your PATH. Otherwise, you need to execute commands from `<klocwork_install>/bin`.

What's next?

Now it's time to validate your database.

Installing the Klocwork Server package on Mac -- Upgrade only

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> This page provides instructions for installing the Server package if you are upgrading.

IMPORTANT: This is not the starting point for upgrading. Make sure you start with Upgrading from a previous version.

Before you begin

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

Prerequisites

- JVM versions: You must install JVM 1.6 on your machine before installing the Klocwork Server package or a desktop analysis plug-in. If you have a previous JVM version installed and you try to install the Server, you will see the error message, "Version of Java is too old". Apple supplies their own version of Java. Use the Software Update feature on your Mac.
- Access level: When installing the Mac packages, you must have administrator access.
- If your organization uses GCC, make sure the correct version of the compiler is in your PATH before you run the installation program. Including the GCC compiler in your PATH automatically creates default links to standard GCC libraries and defines for all the projects you create. Note that any user can override these defaults for a particular project or build by not including the standard libraries and defines. If your organization does not use GCC, do not include it in your PATH when you run the installation program.

Running the installation package

Copy the Server installation package to your desktop and run it, following the prompts. Please note the following:

- All components of the Klocwork Server package are installed. You can't specify which components you want to install.
- On the Server Settings screen, when prompted for the location of the projects_root, specify the **old** projects_root directory that you want to migrate.
- You do not need to set host names and port numbers for the Klocwork Servers during installation. This information will be picked up from your old projects_root directory when it is migrated.

Installation directories

- The Server package is installed in the `/Applications/` and `/Library/Frameworks/` directories.
- Access command-line tools using the symbolic links in `/usr/local/kw/`.

Troubleshooting

Check the installation log from the Console (**Applications > Utilities**) or `var/log/install.log`.

What's next?

Now it's time to validate your database.

Get a license

Getting a license

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>A Klocwork license file contains information about your license server configuration as well as what Klocwork products and features you are licensed to use. You need a license file to start the Klocwork Servers.

Insight uses FLEXlm licensing from Flexera Software (formerly Macrovision). Your Klocwork license must be locked to your license manager server. In the simplest case, this will be the machine where you install the Klocwork Server package.

If you are evaluating or purchasing a Klocwork product, you will need to provide your Klocwork contact with:

*   the FLEXlm host ID, host name, and IP address of the relevant computer
*   if you are using a Flexera Software FLEXid (dongle), the host ID of the dongle.

The following sections show you how to determine this ID.

Determining the FLEXlm hostid of a Linux or Solaris machine

1. Download lmhostid for Linux [1] or lmhostid for Solaris [2] and save it to your local filesystem.

    Tip: If you've already installed the Klocwork Server package, lmhostid is installed to `<server_install>/3rdparty/bin`.

2. In an xterm, cd to the location of lmhostid. For example:

```
bash-2.04$ cd /usr/local/bin
```

3. Run lmhostid. For example:

```
bash-2.04$ ./lmhostid
```

    You see output resembling the following:

```
lmhostid - Copyright (c) 1989-2006 by Macrovision Europe Ltd. and/or
Macrovision Corporation. All rights reserved.
The FLEXlm host ID of this machine is "000437d58057"
```

4. Send the FLEXlm host ID, host name, and IP address to your Klocwork contact. If FLEXlm returns more than one host ID, select one of them.

Determining the FLEXlm hostid of a Windows machine

1. Download lmhostid.exe for Windows [3] and save it to your local filesystem.

    Tip: If you've already installed the Klocwork Server package, lmhostid is installed to `<server_install>\3rdparty\bin`.

2. Open a command window.

3. In the command window, cd to the directory where you saved lmhostid. For example:

```
C:\>cd \klocwork\3rdparty\bin
```

4. Run lmhostid. For example:

```
C:\klocwork\3rdparty\bin>lmhostid
```

You see output resembling the following:

```
lmhostid – Copyright (c) 1989–2006 Macrovision Europe Ltd. and/or
Macrovision Corporation. All Rights Reserved.
The FLEXlm host ID of this machine is "0003e9d454ed"
```

5. Send the FLEXlm host ID, host name, and IP address to your Klocwork contact. If FLEXlm returns more than one host ID, select one of them.

Choosing the proper FLEXlm host ID on Windows

On Windows, the lmhostid utility may return more than one FLEXlm host ID. If this happens, ensure that you choose the correct host ID for the license file.

Running lmhostid for a Windows server results in output resembling the following:

```
lmhostid – Copyright (c) 1989–2003 by Macrovision Corporation. All rights
reserved.
The FLEXlm host ID of this machine is ""00F0D0579C60 0003764D1BD6 00C026000002
00C038000101""
Only use ONE from the list of hostids.
```

In this example, lmhostid returned four FLEXlm host IDs. It is important to select the FLEXlm host ID of a permanent physical network adapter, rather than a virtual NIC, for example a Virtual Private Network (VPN) NIC. Therefore, you need to determine which FLEXlm hostid applies to a permanent network adapter.

To list all network adapters in a Windows system:

1. Open a command window.
2. Enter the following:

```
ipconfig /all
```

The following example shows the `ipconfig /all` output for a Windows server with a built-in network adapter. Note that on Windows, the FLEXlm host ID is the physical address (the MAC address), without the hyphens.

```
Windows IP Configuration
Host Name . . . . . . . . . . . . : TDM02
Primary DNS Suffix . . . . . . . : klocwork.com
...
...
Ethernet adapter Local Area Connection 4:
Connection-specific DNS Suffix . :
Description . . . . . . . . . . . : 3Com 3C920 Integrated Fast Ethernet
Controller (3C905C-TX Compatible)
Physical Address. . . . . . . . . : 00-F0-D0-57-9C-60
DHCP Enabled. . . . . . . . . . . : Yes
...
...
Ethernet adapter Local Area Connection:
Media State . . . . . . . . . . . : Media disconnected
Description . . . . . . . . . . . : 3Com 10/100 Mini PCI Ethernet Adapter
Physical Address. . . . . . . . . : 00-03-76-4D-1B-D6
Ethernet adapter Local Area Connection 3:
```

```
Media State . . . . . . . . . . . : Media disconnected
Description . . . . . . . . . . . : VPN Client Virtual Adapter #2
Physical Address. . . . . . . . . : 00-C0-26-00-00-02
Ethernet adapter Local Area Connection 2:
Media State . . . . . . . . . . . : Media disconnected
Description . . . . . . . . . . . : VPN Client Virtual Adapter
Physical Address. . . . . . . . . : 00-C0-38-00-01-01
```

In this example, **Local Area Connection 4** is a physical adapter and is currently enabled. It would be advisable to lock the license to this adapter (MAC address 00-F0-D0-57-9C-60 which corresponds to the FlexLM host ID 00F0D0579C60), because this FLEXlm host ID will not change. **Local Area Connection** is a physical adapter but is not enabled. **Local Area Connection 2** and **Local Area Connection 3** are virtual adapters and may have their MAC address changed periodically. If you are not sure which to choose, ask your administrator to choose the MAC address of one of the permanent physical adapters.

References

[1] http://developer.klocwork.com/sites/default/files/downloads/apps/linux/lmhostid
[2] http://developer.klocwork.com/sites/default/files/downloads/apps/solaris/lmhostid
[3] http://developer.klocwork.com/sites/default/files/downloads/apps/windows/lmhostid.exe

Installing the Server package

Installing Klocwork Insight

Follow the steps described below to install the Klocwork Server and Desktop Analysis plug-ins. For help, see **Troubleshooting your installation** below.

Before you install

Before installing Klocwork Insight, you may want to take a look at the following articles:

- System requirements
- Release Notes
- About the Klocwork packages and components

Are you upgrading from a previous release?

New for Insight 10.0: we've added a convenient way to import your existing projects to your new Insight installation. See Upgrading from a previous version for more information.

- Upgrading from a previous version
- Running a custom installation for new or upgraded IDEs
- Uninstalling Klocwork Insight

1. Get a license

- Getting a license

2. Install the Klocwork Server

- Installing the Klocwork Server package on Windows
- Installing the Klocwork Server package on Unix
- Installing the Klocwork Server package on Mac
- Viewing and changing Klocwork server settings
- Downloading and deploying the desktop analysis plug-ins

3. Install a desktop analysis plug-in

Users can install a Desktop Analysis plug-in directly from the server installation, by selecting one of the plug-ins listed under **Downloads** on the portal and downloading it to their desktop.

Note: The **Downloads** section will not appear in the portal until the Klocwork Administrator has deployed the plug-ins. See Downloading and deploying the desktop analysis plug-ins for more information.

- Installing a desktop analysis plug-in
- **For Eclipse users:**
  - Install the Klocwork plug-in from the Eclipse update site

After you install

- Installing the Distributed Analysis package
- Unattended installation on Windows
- Testing your installation

Troubleshooting your installation
• Error reading setup initialization file during installation
• Repairing a Windows installation of Klocwork Insight
• Find Klocwork Servers running on your LAN
• Unable to start the Database Server because the path to the socket file is too long
• Unable to start Klocwork Servers following Windows installation
• Database connection error
• Package Load Failure occurs in Visual Studio after I install patch
• IntelliJ IDEA installation not detected; plugin not installed
• Limitations for installation

Installing the Klocwork Server package on Windows

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> This page provides instructions for installing the Klocwork Server package using the installation wizard. For instructions on unattended installation of both the Klocwork Server and desktop analysis plugins, see Unattended installation on Windows.

Your users can install the desktop analysis plug-ins from the product portal ("pull" installation) or, if your organization is set up for it, you can install the clients for your users in an unattended ("push") installation through a Software Management System (SMS) or similar system.

Before you begin

Upgrading? See Upgrading from a previous version.

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

You need a license. See Getting a license if you don't already have one.

Prerequisite:

- Microsoft .NET 4.0 Framework must be installed in order to run the Servers as Windows services

Running two versions of the Klocwork Servers

If you will be running two sets of the Klocwork Servers, for example to test the Klocwork Insight 10.0 Servers while users continue to access your existing servers, you must run them on different projects_root directories (and set the ports appropriately).

Required permissions

- Administrator access is required to install all Windows packages, whether using the installation wizard or unattended installation.
- You must have administrator access to install the Klocwork Server.
- You must have administrator permissions to start the Klocwork Servers (and to run the Klocwork Servers as Windows Services).
- For Windows Server 2008, you must use the 'Run As Administrator' option in order to launch any Klocwork tools which access a projects_root that is located on a root directory.

Installation using the Windows installation wizard

Run the Klocwork Server installation wizard, following the prompts. Note the following:

- During installation, one or more Visual C++ Runtime redistributable packages may be installed on your computer. Depending on your operating system, a reboot may be required at the end of the installation.
- The installation package will automatically detect whether you have a 32-bit or 64-bit operating system and will install the appropriate version of Java.
- If your system locale is Japanese, the installation package runs in Japanese. Otherwise, it runs in English.
- You can specify server information during installation in the Klocwork Servers configuration screen to override the default settings. The defaults for the License Server are localhost and 27000. The default port for the Klocwork Server is 8080. See Viewing and changing Klocwork server settings for more information on ports.
- For information on the *Use secure server connection (HTTPS)* checkbox, see Using a secure Klocwork Server connection.
- You'll be asked where you want to create the projects_root directory, which is the data location for the Klocwork Servers and applications. It contains Klocwork Server settings and information about integration projects and build analysis runs. It also stores the Klocwork license file. The default location is `<server_install>\projects_root`.

  Caution: Do not install the Server package and the projects_root in the Program Files directory. Default security settings for Windows 7 and Windows Server 2008 restrict writing to files in the Program Files directory.

- During installation, you specify whether you want to use the locally installed License Server (*Local*) or connect to a remote License Server (*Remote*). *Local*, the default option, requires you to browse to your license file. If you select *Remote*, you must specify the host name and port number for your License Server.
- If you specify a new `projects_root` location during installation, you have the option of starting the Klocwork Servers as Windows services automatically following installation. This option is available on the **Set up Klocwork Servers dialog** of the Server package installer. If you do not select this option, you need to start the servers manually following installation. See Start the servers below.

Note on the Path environment variable

On Windows, the Klocwork bin directory is automatically added to your Path environment variable as follows:

Installation package	Environment variable modified	Value used
Server	System Path	`<server_install>/bin`
Desktop Analysis Tools	System Path	`<desktop_analysis_tool_install>/bin`

Log files for Windows installation

An installation log file is saved to the Temp directory of Local Settings whenever one of the Klocwork installation packages is started on Windows. For example, on Windows 7, the installation log file is saved to `\Users\<user>\AppData\Local\Temp`.

These log files are named `Klocwork<release_number>-<package>.log`. For example, the installation log file for the Klocwork 10.0 Server package is named `Klocwork10.0-Server.log`.

A `logs` directory is also created in the root Klocwork installation directory during installation. For the Server installer, for example, the log files in this directory store kwservice output when the servers are first started and the projects_root directory is initialized.

Start the servers

To start the servers, use Windows Services Administration or kwservice start:

```
kwservice --projects-root <projects_root> start
```

> *where* <projects_root> is the projects_root directory you specified during installation

Example

```
kwservice --projects-root C:\klocwork\projects_root start
```

Deploy the desktop analysis plug-ins

The Klocwork Administrator must download the desktop analysis tools from http://developer.klocwork.com/support/downloads [1] and deploy them to the server. This will enable your desktop users to download and install the desktop analysis plug-ins directly from the portal. For more information, see Downloading and deploying the desktop analysis plug-ins.

Next steps

Now you're ready to analyze your integration build.

Details: C/C++ | C# | Java

References

[1] http://developer.klocwork.com/support/downloads

Installing the Klocwork Server package on Unix

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Before you begin

Upgrading? See Upgrading from a previous version.

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

You need a license. See Getting a license if you don't already have one.

Running two versions of the Klocwork Servers

If you will be running two sets of the Klocwork Servers, for example to test the Klocwork Insight 10.0 Servers while users continue to access your existing servers, you must run them on different projects_root directories.

Check the system requirements

Refer to the System requirements for a list of required packages and dependencies.

Installation notes

- **Linux only:** There are separate installation packages for 32-bit and 64-bit Java. Make sure you select the one that matches your operating system.
- `ulimit -n` must be 2048 in order to run the Klocwork Server.
- Ensure that the downloaded .sh file is executable. Use the chmod command to set the appropriate permissions:
  `chmod 755 <kw-installer.sh>`
- To control permissions when you are installing Klocwork, change the value of umask.
- Install Klocwork software as a non-root user.
- Ensure that the path in which you install the product is the same path from which users invoke the product. For example, the local path to the installation might be `/local/tools/klocwork`, but users on other machines have to use the NFS path `/opt/tools/klocwork` to invoke the product. Therefore, to ensure that users can invoke the product, use the `/opt/tools/klocwork` path during installation.
- **Important:** Due to MySQL limitations, the projects_root directory should not be located on NFS. It has a special file locking implementation which is not fully supported by MySQL. See also the warning in the MySQL documentation [1].

Running the installation package

Run the following command:

```
kw-server-installer.10.0.x.x.<platform>.sh [options] <install_directory> [component ...]
```

where

- <platform> is `solaris`, `linux` or `aix`
- [<options>] are any of the options listed in Command-line options for the Server package.
- <install_directory> specifies the directory in which you want to install Klocwork. Do not specify a subdirectory of the projects_root directory. Note that if the chosen directory is not empty, you will not be able to continue with the installation.
- [<component ...>] is any of the arguments from Arguments for Server components. Separate multiple components with spaces. If you do not specify one or more components, the entire package will be installed. You can also see a list of arguments for the various components with the *--list* option.

Command-line options for the Server package

Name	Short name	Description
--agree	-a	Agree to license terms and do not display license agreement.
--database-port <port_number>		Specify the port number that you will use to run the Database Server. Default: 3306. This option is equivalent to specifying the port number with kwservice.
--debug		Print debug information
--force	-f	Install without integrity checks
--help	-h	Display this help and exit
--klocwork-port <port_number>		Specify the port number that you will use to run the Klocwork Server. Default: 8080. This option is equivalent to specifying the port number with kwservice.
--license-port <port_number>		Specify that the License Server will be run locally, but on a non-default port. Default: 27000. This option is equivalent to specifying the port number with kwservice.
--license-server <host>[:<port>]		Specify a remote License Server host. The host argument is required; the port argument is optional. Default: localhost:27000. This option is equivalent to specifying the host and port with kwservice. See also Using your organization's FLEXlm server.
--list	-l	List available features (components)
--projects-root <directory>	-p	Specify the complete path to a non-default projects_root directory. Default: `<install_directory>/projects_root`. The directory you specify must meet one of the following conditions: • it does not yet exist • it is empty • it is a valid projects_root directory created previously Do not specify the same directory as the root Klocwork installation directory you have specified. Do not install Klocwork in a subdirectory of the projects_root directory. **IMPORTANT**: If you are upgrading, specify the **old** projects_root directory that you want to migrate.
--use-ssl		use a secure Klocwork server connection (HTTPS)
--version	-v	display the version of Klocwork software and exit

Arguments for Server components

To install this Server component (feature)...	...enter the argument...
License Server	LicenseServer
Klocwork Server	KlocworkServer
Administration and analysis management tools	BuildTools

Add Klocwork to your PATH

On Unix, we recommend adding `<klocwork_install>/bin` to your PATH. Otherwise, you need to execute commands from `<klocwork_install>/bin`.

Copy the license file

Copy your license file to the following location:

```
<projects_root>/licenses
```

The license file must have the extension `.lic`.

Note: See Customizing licensing for licensing options such as using your organization's license server.

Start the servers

Start the servers with kwservice start:

```
kwservice --projects-root <projects_root> start
```

where <projects_root> is the projects_root directory you specified during installation

Example

```
kwservice --projects-root /space/klocwork/projects_root start
```

You see messages indicating that the servers have been started, showing the server host name and port number and the path to the projects_root. For example:

```
Using projects root: /space/klocwork/projects_root
Local Host is: serverxyz.com [13.1.1.142]
Starting License Server [started on serverxyz.com:27000] (projects
root is /space/klocwork/projects_root)
Starting Database Server [started on serverxyz.com:3306] (projects
root is /space/klocwork/projects_root)
Starting Klocwork Server [started on serverxyz.com:8080] (projects
root is /space/klocwork/projects_root)
```

Important: If you create a script to start the Klocwork servers automatically, do not name your script 'klocwork' as it will interfere with existing processes.

Deploy the desktop analysis plug-ins

The Klocwork Administrator must download the desktop analysis tools from http://developer.klocwork.com/support/downloads [1] and deploy them to the server. This will enable your desktop users to download and install the desktop analysis plug-ins directly from the portal. For more information, see Downloading and deploying the desktop analysis plug-ins.

Next steps

Now you're ready to analyze your integration build.

Details: C/C++ | C# | Java

Installing the Klocwork Server package on Mac

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>   This   page   provides instructions for installing the Klocwork Server package using the installer.

Before you begin

Upgrading? See Upgrading from a previous version.

Where do I get the software?

Download the packages from Klocwork support [1]. Typically, only one or two users in an organization have access to Klocwork Developer Network. If you don't have access, you can register for a new account.

You need a license. See Getting a license if you don't already have one.

Prerequisites

- **JVM versions:** You must install JVM 1.6 on your machine before installing the Klocwork Server package or a desktop analysis plug-in. If you have a previous JVM version installed and you try to install the Server, you will see the error message, "Version of Java is too old". Apple supplies their own version of Java. Use the Software Update feature on your Mac.
- **Access level:** When installing the Mac packages, you must have administrator access.
- If your organization uses GCC, make sure the correct version of the compiler is in your PATH before you run the installation program. Including the GCC compiler in your PATH automatically creates default links to standard GCC libraries and defines for all the projects you create. Note that any user can override these defaults for a particular project or build by not including the standard libraries and defines. If your organization does not use GCC, do not include it in your PATH when you run the installation program.

Default settings and installation directories

- The Klocwork Server and desktop analysis packages are installed in the `/Applications/` and `/Library/Frameworks/` directories.
- Access command-line tools using the symbolic links in `/usr/local/kw/`.
- The projects_root directory installs to `/Users/Shared/Klocwork/projects_root/` by default.
- The Klocwork Servers are set to localhost, running on the default ports.

You can override server settings and specify where the projects_root is created during installation.

Running the installation package

Copy the Klocwork Server installation package to your desktop and run it, following the prompts. Please note the following:

- The Server Settings screen is where you can adjust:
  - the location of the projects_root directory
  - ports for the Klocwork and Database Servers
- During installation, you specify whether you want to use the locally installed License Server (*Local*) or connect to a remote License Server (*Remote*). *Local*, the default option, requires you to browse to your license file. If you select *Remote*, you must specify the host name and port number for your License Server.

Troubleshooting

Check the installation log from the Console (**Applications > Utilities**) or `var/log/install.log`.

Start the servers

Start the servers with kwservice start:

```
kwservice --projects-root <projects_root> start
```

> *where* <projects_root> is the projects_root directory you specified during installation

Example

```
kwservice --projects-root /Users/Shared/Klocwork/projects_root start
```

You see messages indicating that the servers have been started, showing the server host name and port number and the path to the projects_root. For example:

```
Using projects root: /space/klocwork/projects_root
Local Host is: serverxyz.com [13.1.1.142]
Starting License Server [started on serverxyz.com:27000] (projects
root is /space/klocwork/projects_root)
Starting Database Server [started on serverxyz.com:3306] (projects
root is /space/klocwork/projects_root)
Starting Klocwork Server [started on serverxyz.com:8080] (projects
root is /space/klocwork/projects_root)
```

Deploy the desktop analysis plug-ins

The Klocwork Administrator must download the desktop analysis tools from http://developer.klocwork.com/support/downloads [1] and deploy them to the server. This will enable your desktop users to download and install the desktop analysis plug-ins directly from the portal. For more information, see Downloading and deploying the desktop analysis plug-ins.

Next steps

Now you're ready to analyze your integration build.

Details: C/C++ | C# | Java

Viewing and changing Klocwork server settings

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>**Note:** If the Klocwork Servers are running, you must stop them before attempting to change service properties. See Stopping the Klocwork Servers.

Viewing server settings

To view the host and port settings for the Klocwork Servers, use the command kwservice get-service-properties (this does not use a Klocwork license).

Setting the host name of the Klocwork Servers

If you have installed the Klocwork Servers in a central location and will be running one or more of the servers from another host machine, you will need to set the host name for these servers.

IMPORTANT NOTES:

- When issuing server configuration commands, the projects_root must be visible from the machine you're logged into.
- If you specify a different host for one or more Klocwork Servers using the procedure below, you will no longer be able to start the servers from the host where you previously started them.
- If the server hosts are located on a different subnet from the Klocwork clients, you *must* use the fully qualified host name for the Klocwork Servers in the procedure below. Otherwise, the clients will not be able to connect to the servers.
- You cannot change the physical host of the Klocwork License Server in the license file. If you need to move the License Server to another host, you must contact Klocwork for a new license file. However, you can use the procedure below if the name of the machine hosting the License Server has changed, or if you want to change how the host name is defined (for example, from a simple to a fully qualified host name). The host name in the license file must match the host name specified with the procedure below.
- If you have set up redundant License Servers, ensure that you specify the host name of the master License Server.
- See also Making network changes that affect the host name or IP address of a host machine.

To set the host name for one of the Klocwork Servers:

1. Stop the server, if is running. See Stopping the Klocwork Servers.
2. Run the following command:

```
kwservice --projects-root <projects_root> set-service-property <server_name> host <host_name>
```

where

- <projects_root> is the projects_root directory you want to use
- <server_name> is one of:
  - database
  - license
  - klocwork
- <host_name> is the name of the machine that will host the specified server (Klocwork recommends using the fully qualified host name; see "Important Notes" above).

Example:

```
kwservice --projects-root C:\Klocwork\projects_root set-service-property database host server0196.acme.com
```

3. Start the server. See Starting the Klocwork Servers.

Setting the ports used by the Klocwork Servers

The following table shows the default port numbers for a new installation of the Klocwork Servers.

Default port numbers

Server name	Port
Database Server	3306
License Server	27000 plus 33133
Klocwork Server	8080 plus 8081

Important:

*   If you migrated from a previous version of Klocwork, your servers will be running on the ports stored in the old projects_root.
*   Each Klocwork Server must run on a dedicated port. Do not set any other application to use the same port numbers.
*   The Klocwork Server uses two consecutive ports (the one you choose, plus the next one).
*   The default port for each server is the typical port for that type of server (for example, port 3306 is the typical port for a MySQL server), so if you will be running the Klocwork Servers on the default ports, ensure that you are not already running other servers on these ports.
*   When setting a port number with the procedure below, the projects_root directory must be writable from the machine you're logged into.
*   When the Klocwork Servers are running behind a firewall, the firewall needs to be configured to allow client communication to the servers.
*   If port 33133 is not available for use by the License Server, follow the instructions in Changing the vendor daemon port in your license file.

To set the port used by a Klocwork Server:

1. Stop the server, if is running. See Stopping the Klocwork Servers.
2. Run the following command:

```
kwservice --projects-root <projects_root> set-service-property <server_name> port <port_number>
```

where

*   <projects_root> is the projects_root directory you want to use (mandatory argument)
*   <server_name> is one of:
    *   database
    *   license
    *   klocwork
*   <port_number> is the port to be used by the specified Klocwork Server (defaults shown in table above).

3. Restart the server. See Starting the Klocwork Servers.

Example

To set the port used by the Klocwork Server to port 8074:

```
kwservice --projects-root C:\Klocwork_Server\projects_root set-service-property klocwork port 8074
```

Making network changes that affect the host name or IP address of a host machine

If you need to change any aspect of a server's network setup that will affect its IP address and/or its fully qualified host name, follow the procedure below to ensure that Klocwork applications continue to function properly.

Note: This includes the situation where you need to disconnect a Windows computer from the network, when you have installed both the servers and the clients on the computer.

To make a network change that will affect the host name or IP address of a machine hosting Klocwork Servers:

1. Stop the Klocwork Servers. See Stopping the Klocwork Servers.
2. Make your network configuration change (or disconnect your computer from the network).
3. If the Klocwork License server is running on the machine, make a backup copy of the Klocwork license file, then edit the license file to change the host name or IP address to the new host name or IP address.
4. Start the Klocwork Servers again. See Starting the Klocwork Servers.
5. Communicate the changes to anyone else who needs to know (for example, IT team, Klocwork administrator, build engineer, or development teams).

Downloading and deploying the desktop analysis plug-ins

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

The desktop analysis tools refer to the desktop analysis plug-ins and the Klocwork Command Line tools.

As Klocwork Administrator, you can download the desktop analysis tools from http://developer.klocwork.com/ support/downloads (see **Desktop Tools Packages**) and place them within the `clients` directory of the Klocwork Server installation. This will allow your users to download a desktop analysis tool directly from the portal. Once downloaded, your users can easily install a desktop analysis plugin on their own.

Depending on your corporate IT policies, you may decide to install the Klocwork desktop analysis tools yourself, as part of a controlled rollout. If this is the case, follow the steps below to download the Klocwork Desktop tools, then see the installation instructions for details on how to install the plug-ins on your user's desktops.

The Klocwork Desktop Tools packages are organized by platform, where each archive contains a plug-in for Eclipse (a download site archive), IntelliJ IDEA, and Visual Studio as well as the Command Line tools package.

Package	Platform
kw-insight-desktop-tools.10.0.0.xxxx.windows.zip	Windows
kw-insight-desktop-tools.10.0.0.xxxx.mac.zip	Mac
kw-insight-desktop-tools.10.0.0.xxxx.linux.zip	Linux
kw-insight-desktop-tools.10.0.0.xxxx.solaris.zip	Solaris

Note: the *xxxx* portion of the path indicates the minor build number.

To deploy the Klocwork Desktop tools:

1. Download the applicable Klocwork Desktop tools package from the download site [1] at developer.klocwork.com.

   You'll need to log in to the site using your Klocwork Developer Network user ID and password. If you do not currently have a Klocwork Developer Network user ID and password, you'll need to register as a new user.
2. Once downloaded, unzip the Desktop Tools package archive into the `<server_install_path>\clients` directory, where `<server_install_path>` is the location of your Klocwork Server installation on

Windows.

- On Linux, the folder is located at `<server_install_path>/clients`
- On Mac, the folder is located at `/usr/local/kw/server/clients` or `/Library/Frameworks/KlocworkServer.framework/Versions/10.0/clients`

  Note: This directory contains a single file called `clients.json`. **Do not delete this file.**

1. Refresh the portal and verify that the **Downloads** list appears on the right hand side of the portal. The **Downloads** list contains links to the desktop analysis plug-ins. Your users can download and install the desktop analysis tools directly from here.
2. Communicate the deployment to your users, either by sending them a link to the portal and to the installation instructions or by sending an internal email that describes how users can download and install the plug-ins.

kwupdate

<yambe:breadcrumb self="kwupdate">Command_Reference|Command reference</yambe:breadcrumb>The kwupdate command for Unix lists installed components and installs/uninstalls patches.

Note: If you did not install a particular component with the installation package, it's not possible to install that component later with kwupdate. In order to install another component of the Klocwork tools, you must re-run the appropriate Server installation package.

Synopsis

List installed patches

```
kwupdate [<options>] --list-updates
```

List installed components

```
kwupdate [<options>] --list
```

Install a previously uninstalled patch

You normally install a patch by running a self-extracting patch installer script, for example, RP9.5.0.XXXX-linux-9.5.0.YYYY.sh. You would only run the following command to install a previously uninstalled patch.

```
kwupdate [<options>] --install --sequence <patch_number> ALL
```

where

- <options> are any of the options from the table below
- <patch_number> is the number of the patch you want to reinstall
- ALL means apply the patch to all installed components

Example

```
kwupdate --install --sequence 11269 ALL
```

Uninstall a patch

```
kwupdate [<options>] --uninstall --sequence <patch_number> ALL
```

where

- <options> are any of the options from the table below
- <patch_number> is the number of the patch you want to uninstall
- ALL means uninstall the patch from all installed components

Example

```
kwupdate --uninstall --sequence 11269 ALL
```

Options

Name	Short name	Description
--config <file>	-C	use this configuration file (default is `KW-HOME/etc/kwupdate.conf`)
--define <name>=<value>	-D	define a variable with the specified value. Some packages use variables to keep track of important information. For example, the IntelliJ IDEA plugin requires the "idea.home" variable to be set to the IntelliJ IDEA home directory.
--help	-h	print this help and exit
--idea-dir <dir>		IntelliJ IDEA home directory. Equivalent to `--define idea.home=<dir>`
--install	-i	install previously uninstalled patches. Use *--sequence* to specify patch numbers.
--list	-l	list installed components
--list-updates		list installed updates
--no-saved-variables	-N	do not use or update remembered variable values. Normally, when a variable is set, its value is saved in the kwupdate database, so that you do not have to re-type the same variables. This option instructs kwupdate to ignore saved variable values and not to update the kwupdate internal database with new variable values.
--quiet	-q	print as little as possible (only errors and warnings)
--sequence <num>	-n	specify update sequence number (use with *--install*, *--uninstall*). Separate multiple patch numbers with spaces.
--uninstall	-u	remove installed patch(es). Use *--sequence* to specify patch numbers.
--version	-v	print version and exit

Installing a desktop analysis plug-in or command line utility

Installing a desktop analysis plug-in

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

After your Klocwork Administrator has installed and started the Klocwork Servers, and downloaded and deployed the desktop analysis plug-ins to the server installation, your users can access the product portal and download and install a desktop analysis plug-in. If your users prefer to work on the command line or wish to do a combination of both, they may want to install the command line tools.

For more information about deploying the desktop analysis plug-ins see, Downloading and deploying the desktop analysis plug-ins.

To install a plug-in, open the product on the machine where you've installed Insight. For example, go to:

http://server01:8080/portal/Portal.html

Download a plug-in

In the Downloads menu, on the right-hand side of the portal, you will see a list of options for plug-ins to choose from. From here, you can download plug-ins for the following:

- Visual Studio (Windows only)
- IntelliJ IDEA
- Command Line tools
- Eclipse

Expand the menu, then click an option to download the installer to your computer.

Install your plug-in

Once you've downloaded the installation package from the server, you must run the installer. On Windows and Mac, an installation wizard is provided to guide you through the installation process.

Before you begin

- You can override the default settings for the Klocwork Servers during installation. The defaults for the License Server are localhost and 27000. The default port for the Klocwork Server is 8080.
- **On Windows**: Change Current Destination Directory screen: Avoid installing the package in the Program Files directory on Windows Vista, Windows Server 2008 and Windows 7 machines. Windows User Access Control (UAC) restricts writing to the Program Files directory.
- Klocwork Servers configuration screen: Specify the Klocwork Server information provided by your Klocwork administrator. Select *Use secure server connection (HTTPS)* if a secure Klocwork Server connection has been configured.
- **JVM version:** You must install JVM 1.6 Update 45 or later or JVM 1.7 update 25 or later on your machine before installing the desktop analysis plug-in.
- Make sure that you have the appropriate administrator access before installing the desktop plugin.
- **On Unix:**

- To control permissions when you are installing Klocwork Insight, change the value of umask.
- To change the permissions on an existing installation, use chmod.
- Install Klocwork software as a non-root user.
- **Linux only:** There are separate installation packages for 32-bit and 64-bit Java. Make sure you select the one that matches your operating system.

On Windows and Mac

For each of these plug-ins on Windows and Mac, simply download the package and run the installation wizard. The installation wizard will guide you through the rest of the process.

On Mac

- Files are installed in the following location: */Library/Frameworks/*
- Access command-line tools using the symbolic links in `/usr/local/kw/`.

On Unix

You can install the packages using the following command:

`kw-insight-<plug-in>-installer.sh [options] <install_directory>`

Where

- <plug-in> is the name of the plug-in you want to install. For example, 'cmd' or 'idea'.
- [options] are any command line options you may want to specify. In most cases, just specify '-a' here to indicate that you agree to the terms of the Klocwork license. Use −h to get help on what available command line options exist.
- <install_directory> specifies the directory where the Insight plug-in will be installed

Add the bin directory to your PATH

We recommend adding the `<command_line_tools_install>/bin` directory to your PATH environment variable. Procedures in the documentation assume that you have added the bin directory to your PATH.

Command-line options for the desktop analysis plugin package on Unix

Name	Short name	Description
--agree	-a	agree to license terms and do not display license agreement
--force	-f	install without integrity checks
--help	-h	display this help and exit
--klocwork-server <host>[:<port>]		specify the Klocwork Server host name and port number. Default: localhost:8080.
--license-server <host>[:<port>]		specify the License Server host name and port number. Default: localhost:27000
--use-ssl		use a secure Klocwork Server connection
--version	-v	display the version of Klocwork software and exit
--debug		print the debug information

Example: Installing the Command Line Tools package on Linux

```
kw-cmd-installer.linux64.sh –a /home/jlee/klocwork
```

where

- *-a* means that you agree to the terms of the Klocwork license
- `/home/jlee/klocwork` specifies where Klocwork Insight will be installed

Example: Installing Klocwork Desktop Plug-in for IntelliJ IDEA on Linux

```
kw-idea-installer.linux64.sh –a "/opt/klocwork/user 10.0" --klocwork-server server1:8084
```

where

- *-a* means that you agree to the terms of the Klocwork license
- `"/opt/klocwork/user 10.0"` is the path to the Klocwork user install directory
- *--klocwork-server* specifies the name and port of the Klocwork server

Run an analysis

After you've installed your desktop analysis plug-in, you should run your analysis to ensure that your plug-in is functioning correctly, and, if you've migrated from a previous version, to ensure that old defects are updated to work in the latest version of the software. In the desktop analysis plug-in for Visual Studio, defects from previous versions of the software appear greyed out until you run your first analysis.

Troubleshooting

- Package Load Failure occurs in Visual Studio after I install patch
- Error reading setup initialization file during installation

What's next?

- Eclipse users need to install the Klocwork plug-in from the Eclipse update site.
- Go to Fixing issues before check-in with Klocwork Desktop Analysis and choose your development environment.

Installing the Klocwork plug-in from the Eclipse update site

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Prerequisites:

• The Downloads section (which contains the Eclipse update site link) will not appear in the portal until the Klocwork Administrator has deployed the plug-ins. See Downloading and deploying the desktop analysis plug-ins for more information.

To install the Klocwork Desktop Analysis plug-in for Eclipse, simply follow the steps below.

    1. In the Insight product portal, under **Downloads**, click **Eclipse update site**.

    2. Copy the URL specific to your platform.

    3. Open Eclipse.

Important: The Klocwork plug-in for Eclipse C/C++ requires the Microsoft Visual C++ 2008 Redistributable Package(32-bit) and the Microsoft Visual C++ 2012 Redistributable Package(32-bit), which you need to install manually. You can download them both by accessing the Insight product portal and selecting **Eclipse update site** under **Downloads**.

Follow the instructions according to the version of Eclipse you're using:

Eclipse 3.4	Eclipse 3.5 and greater
4. In Eclipse, go to **Help > Software Updates**.	4. In Eclipse, go to **Help > Install New Software**.

    Wind River Workbench: Select the *Advanced Device Development* perspective (the button near the upper right) to access **Help > Software Updates**.

    5. In the **Install** dialog, paste the URL into the **Work with:** field.

    6. Now click the box next to Klocwork Tools, click Next and the wizard will guide you through the rest of the installation process.

    7. When you are prompted to restart Eclipse, click **Yes**.

What's next?

To get started with a Klocwork desktop analysis, go to one of the following:

• Getting started with Klocwork Desktop C/C++ Plug-in for Eclipse
• Getting started with Klocwork Desktop Java Plug-in for Eclipse

Running a custom installation for new or upgraded IDEs

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>If, after you installed Klocwork Insight, you upgraded your IDE, you must uninstall the previous version of the plug-in. For uninstallation information, see Uninstalling Klocwork Insight.

After uninstalling, either:

- re-run the Klocwork desktop analysis plug-in installer, or
- install from the Eclipse plugin from the update site in your new version of Eclipse

If you're using Klocwork Desktop Command Line or Klocwork Desktop, you don't have to do anything further.

Upgrade steps are provided below, by IDE plug-in.

Visual Studio

In Windows, go to **Control Panel > Programs and Features**. Right-click **Klocwork for Visual Studio** and select **Change** to modify your settings.

Deselect features you don't want installed.

Eclipse

Regardless of the Eclipse version you upgraded to, simply install the Eclipse plugin from the update site. See Install the Klocwork plug-in from the Eclipse update site.

IntelliJ IDEA

If you installed the upgraded version of IntelliJ IDEA in the same directory, you don't need to do anything further.

If you installed IDEA to a different location:

- **Windows:**

  Re-run the Klocwork desktop analysis for IntelliJ iDEA installer.

  During installation, Klocwork Insight automatically detects your IntelliJ IDEA directory and installs the plug-in directory to that location. If more than one IDEA installation directory is detected, you have to browse to the preferred location.

- **Linux:**

  Run the following command:

```
kw-idea-installer.linux64.sh –a <user_install>
```

  where

  - <user_install> is the directory where you want to install Klocwork. Note that if the chosen directory is not empty, you will not be able to continue with the installation.

    Example:

```
kw-idea-installer.linux64.sh – a /home/jlee/Klocwork
```

Installing the Distributed Analysis package

Installing the Distributed Analysis package

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> The Distributed Analysis components are available as a separate Klocwork installation package (for example, on Linux, the package is `kw-dist-build-installer.10.x.x.xx.linux.sh`).

Installing on Unix

To install the complete Klocwork Distributed Analysis package on Unix:

1. Download the Klocwork Distributed Analysis installation package for your operating system to a temporary directory.
2. Ensure that the downloaded `.sh` file is executable. Use the `chmod` command to set the appropriate permissions. Enter:

```
chmod 755 <executable-name>
```

> **Note:** Install Klocwork software as a non-root user.

3. Run the executable with the options and arguments you want.

```
<kw-dist-analysis-installer> -a -i <install_directory>
```

> *where:*
>
> <kw-dist-analysis-installer> is the name of the installation executable
>
> -a indicates that you accept the license agreement
>
> <install_directory> is the absolute path to the location in which you want to install the Distributed Analysis package

Installing on Windows

On Windows, you can use the installation wizard or perform an unattended installation.

To install the Klocwork Distributed Analysis package on Windows, you must have administrator permissions for the machine you want to install on.

Installing Klocwork with the installation wizard

To install the Klocwork Insight Distributed Analysis package or its components on a local machine:

1. Download the Klocwork Distributed Analysis package for Windows to a temporary directory.
2. Run the installation executable.

> The graphical user interface initializes and prepares.
>
> The Welcome screen of the wizard appears.

3. Click **Next**.

> The License Agreement screen appears.

4. Review the license agreement, and, if you agree, click "I accept the terms of the license agreement".
5. Click **Next**.

The "Destination Directory" screen appears.

The default destination directory is the local drive with the most available space. For example:

```
D:\Klocwork\Distributed Analysis 10.0\
```

6. Click **Next** to accept the default folder or click **Change...** to install Klocwork in a different location.

If you click **Change...**, the Change Current Destination Folder screen appears. Browse to the folder where you want to install Klocwork.

Important: Avoid installing the package in the Program Files directory on Windows Vista, Windows Server 2008 and Windows 7 machines. Windows User Access Control (UAC) restricts writing to the Program Files directory.

7. Click **OK**.

8. Click **Next**.

The Setup Type screen appears.

By default, the Complete button is selected.

9. To install the entire Klocwork Distributed Analysis package on one machine, leave the *Complete* button selected and go to step 11.

To select one component to install on this machine, click *Custom* and click **Next**.

The Custom Setup screen appears, showing two choices.

Note: In the Windows installation wizard, the term "feature" means "component".

If there is a component you do not want to install on this machine, click the icon of the component and click **This feature will not be available**. Any components you do *not* disable will be installed. Click off **Klocwork Distributed Analysis Server** or **Klocwork Distributed Analysis Agent**, depending on which component you do *not* wish to install.

Important: Ensure that you choose a location with enough disk space. See System requirements. To see how much disk space is available on the machine, click **Space**.

10. Click **Next**.

The Ready to Install the Program screen appears.

11. To review or change any of your installation settings, click **Back.** To continue the installation with the settings you have, click **Install**.

A progress bar appears while Klocwork installs.

The Setup Wizard Completed screen appears.

12. Click **Finish**.

Running an unattended installation on Windows

To run an unattended Windows installation of the Distributed Analysis package, enter the following command:

```
<kw-dist-build-installer> /S/v"/qn [ADDLOCAL=<component_code>] INSTALLDIR=<install_directory> /lv* <log_file>"
```

where:

- <kw-dist-build-installer> is the name of the Windows Distributed Analysis installation executable
- ADDLOCAL=<component_code> is optional and allows you to install only the Server or the Agent component of the package
- <component_code> is either `DistributedAnalysisServer` or `DistributedAnalysisAgent`
- <install_directory> is the absolute path to the directory in which you want to install
- /lv* <log_file> allows you to log installation errors to file (recommended). The directory you specify must already exist. Use the absolute path to the log file.

Note: Surround any value that contains spaces with escaped quotation marks (\").

Example:

```
kw-dist-build-installer.10.0.0.0.windows.exe /S /v"/qn
INSTALLDIR=\"C:\Klocwork\10.0.0.0\Distributed Analysis\"
<br/>/lvx* C:\Klocwork\dist_analysis.log"
```

Log files for Windows installation

An installation log file is saved to `%USERPROFILE%\Local Settings\Temp` whenever one of the Klocwork installation packages is started on Windows.

These log files are named `Klocwork<release-number>-<package>.log`. For example, the installation log file for the Klocwork 10.0 Server package is named `Klocwork10.0-Server.log`.

A logs directory is also created in the root Klocwork installation directory during installation on Windows. For the Server installer, for example, the log files in this directory store kwservice output when the servers are first started and the projects_root directory is initialized.

If you need to troubleshoot your installation, check these logs.

What's next?

Now it's time to Integrate Klocwork with your build.

Configuring and starting the Klocwork servers

Viewing and changing Klocwork server settings

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>**Note:** If the Klocwork Servers are running, you must stop them before attempting to change service properties. See Stopping the Klocwork Servers.

Viewing server settings

To view the host and port settings for the Klocwork Servers, use the command kwservice get-service-properties (this does not use a Klocwork license).

Setting the host name of the Klocwork Servers

If you have installed the Klocwork Servers in a central location and will be running one or more of the servers from another host machine, you will need to set the host name for these servers.

IMPORTANT NOTES:

* When issuing server configuration commands, the projects_root must be visible from the machine you're logged into.
* If you specify a different host for one or more Klocwork Servers using the procedure below, you will no longer be able to start the servers from the host where you previously started them.
* If the server hosts are located on a different subnet from the Klocwork clients, you *must* use the fully qualified host name for the Klocwork Servers in the procedure below. Otherwise, the clients will not be able to connect to the servers.
* You cannot change the physical host of the Klocwork License Server in the license file. If you need to move the License Server to another host, you must contact Klocwork for a new license file. However, you can use the procedure below if the name of the machine hosting the License Server has changed, or if you want to change how the host name is defined (for example, from a simple to a fully qualified host name). The host name in the license file must match the host name specified with the procedure below.
* If you have set up redundant License Servers, ensure that you specify the host name of the master License Server.
* See also Making network changes that affect the host name or IP address of a host machine.

To set the host name for one of the Klocwork Servers:

1. Stop the server, if is running. See Stopping the Klocwork Servers.
2. Run the following command:

```
kwservice --projects-root <projects_root> set-service-property <server_name> host <host_name>
```

   where

   * <projects_root> is the projects_root directory you want to use
   * <server_name> is one of:

     * database
     * license

- klocwork
- <host_name> is the name of the machine that will host the specified server (Klocwork recommends using the fully qualified host name; see "Important Notes" above).

    Example:

```
kwservice --projects-root C:\Klocwork\projects_root set-service-property database host server0196.acme.com
```

3. Start the server. See Starting the Klocwork Servers.

Setting the ports used by the Klocwork Servers

The following table shows the default port numbers for a new installation of the Klocwork Servers.

Default port numbers

Server name	Port
Database Server	3306
License Server	27000 plus 33133
Klocwork Server	8080 plus 8081

Important:

- If you migrated from a previous version of Klocwork, your servers will be running on the ports stored in the old projects_root.
- Each Klocwork Server must run on a dedicated port. Do not set any other application to use the same port numbers.
- The Klocwork Server uses two consecutive ports (the one you choose, plus the next one).
- The default port for each server is the typical port for that type of server (for example, port 3306 is the typical port for a MySQL server), so if you will be running the Klocwork Servers on the default ports, ensure that you are not already running other servers on these ports.
- When setting a port number with the procedure below, the projects_root directory must be writable from the machine you're logged into.
- When the Klocwork Servers are running behind a firewall, the firewall needs to be configured to allow client communication to the servers.
- If port 33133 is not available for use by the License Server, follow the instructions in Changing the vendor daemon port in your license file.

To set the port used by a Klocwork Server:

1. Stop the server, if is running. See Stopping the Klocwork Servers.
2. Run the following command:

```
kwservice --projects-root <projects_root> set-service-property <server_name> port <port_number>
```

   where

   - <projects_root> is the projects_root directory you want to use (mandatory argument)
   - <server_name> is one of:

       - database
       - license
       - klocwork
   - <port_number> is the port to be used by the specified Klocwork Server (defaults shown in table above).
3. Restart the server. See Starting the Klocwork Servers.

Example

To set the port used by the Klocwork Server to port 8074:

```
kwservice --projects-root C:\Klocwork_Server\projects_root set-service-property klocwork port 8074
```

Making network changes that affect the host name or IP address of a host machine

If you need to change any aspect of a server's network setup that will affect its IP address and/or its fully qualified host name, follow the procedure below to ensure that Klocwork applications continue to function properly.

Note: This includes the situation where you need to disconnect a Windows computer from the network, when you have installed both the servers and the clients on the computer.

To make a network change that will affect the host name or IP address of a machine hosting Klocwork Servers:

1. Stop the Klocwork Servers. See Stopping the Klocwork Servers.
2. Make your network configuration change (or disconnect your computer from the network).
3. If the Klocwork License server is running on the machine, make a backup copy of the Klocwork license file, then edit the license file to change the host name or IP address to the new host name or IP address.
4. Start the Klocwork Servers again. See Starting the Klocwork Servers.
5. Communicate the changes to anyone else who needs to know (for example, IT team, Klocwork administrator, build engineer, or development teams).

Starting the Klocwork Servers

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>The Klocwork Servers must be running before you perform project management tasks, and before Klocwork Insight can access data and reports.

Note for Windows: Depending on your configuration, you may be running the Klocwork Servers as Windows services, or as regular processes under the control of the kwservice utility. If you are running the Klocwork Servers as Windows services, you must use Windows Services administration to start, stop and check the Klocwork Servers, rather than kwservice.

Requirements for starting servers

*   Either you must put a copy of your Klocwork license in the `<projects_root>/licenses directory`
    or
    If you will use your organization's FLEXlm license manager, you must configure a path to that server during installation, or with the kwservice set-service-property command. See Setting the host name of the Klocwork servers.
*   You can manage the Klocwork Servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands locally.
*   The path to the projects_root must be the same on all server hosts.
*   The path to the Klocwork executables must be the same on all server hosts.
*   The user starting the Klocwork Servers must have write access to the projects_root directory.

Starting the servers as regular processes

To start all of the Klocwork Servers as regular processes, run the following command:

```
kwservice --projects-root <projects_root> start
```

where <projects_root> is the projects_root directory you want to use

To start one of the Klocwork Servers, run the following command:

```
kwservice --projects-root <projects_root> start [<server_name>]
```

where

- <server_name> can be one of:
    - database
    - license
    - klocwork
- <projects_root> is the projects_root where the servers are running

Tip: On Windows, you can also start the Klocwork Servers by clicking **Start > All Programs > Klocwork 10.0 > Start Klocwork Servers**.

Examples

To start all Klocwork Servers:

```
kwservice --projects-root "C:\Klocwork\Server 10.0\projects_root" start
```

To start the Klocwork Server:

```
kwservice --projects-root "C:\Klocwork\Server 10.0\projects_root" start klocwork
```

You see messages indicating that the servers have been started, showing the server host name and port number and the path to the projects_root. For example:

```
Using projects root: C:\Klocwork\projects_root
Local Host is: serverxyz.com [13.1.1.142]
Starting  License  Server  [started  on  serverxyz.com:27000]  (projects
root is C:\Klocwork\Server 10.0\projects_root)
Starting  Database  Server  [started  on  serverxyz.com:3306]  (projects
root is C:\Klocwork\Server 10.0\projects_root)
Starting Klocwork Server [started on serverxyz.com:8080]
```

Starting the servers as Windows services

Your Windows services may already be running. During installation you have the option of automatically starting the Klocwork Servers as Windows services when installation has completed.

Note: It is not possible to run two sets of the Klocwork Servers as Windows Services on one host when the servers are of the same Klocwork version. For more details, see Moving or creating additional projects root directories.

When running the Klocwork servers as Windows Services, the Klocwork Server is dependent on the Database Server. This means:

- When you start or restart the Klocwork Server, the Database Server will also start.
- When you stop the Database Server, the Klocwork Server will also stop.

To start or restart one or more Klocwork Servers as Windows services, use the Windows Services Administration Control Panel.

Alternatively, use the following commands:

```
net start "Klocwork 10.0 Database Server"
net start "Klocwork 10.0 License Server"
net start "Klocwork 10.0 Server"
```

What's next?

Now it's time to set up and analyze an integration project. See Integration build analysis.

Stopping the Klocwork Servers

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>**Warning:** If possible, schedule stopping the servers when users will not be using Klocwork applications, so that users do not lose data. Warn users that you plan to stop the servers.

Typically, once you have started the Klocwork servers, you leave them running indefinitely to handle information requests from Klocwork client applications. Occasionally, you may have to stop the servers when you are, for example, shutting down the machine running the server, upgrading your Klocwork software, replacing the license file, or changing your server configuration. Before you change server properties such as host name and port number, you must stop the Klocwork server whose properties you want to change.

Note for Windows: If you are running the Klocwork servers as Windows Services, which is the default setup, you must use Windows Services administration to start, stop and check the Klocwork servers, rather than kwservice.

Requirements for stopping servers

- You must be logged into the host machine directly. You cannot stop servers remotely.
- Prior to shutting down all Klocwork servers, advise users of Klocwork clients to shut down client applications. If they do not do so, they may lose data.

Note: The messages indicating that the servers have stopped actually occur while they are stopping. Before you start another process such as restarting the servers or doing a backup, wait a minute.

Stopping the servers running as regular processes

To stop all of the Klocwork servers running as regular processes, run the following command:

```
kwservice --projects-root <projects_root> stop
```

where <projects_root> is the projects_root directory you want to use

To stop one of the Klocwork servers, run the following command:

```
kwservice --projects-root <projects_root> stop <server_name>
```

where

- <server_name> can be one of:
  - database
  - license
  - klocwork
- <projects_root> is the projects_root where the servers are running

Tip: On Windows, you can also stop the Klocwork servers by clicking **Start > All Programs > Klocwork > Stop Klocwork Servers**.

Examples

To stop all Klocwork servers:

```
kwservice --projects-root "C:\Klocwork\Server 10.0\projects_root" stop
```

To stop just the Klocwork Server:

```
kwservice --projects-root "C:\Klocwork\Server 10.0\projects_root" stop klocwork
```

You see messages indicating that the servers have been stopped. For example:

```
Using projects root: C:\Klocwork\Server 10.0\projects_root
Local Host is: serverxyz.com [13.1.1.142]
Stopping License server [stopped]
Stopping Database server [stopped]
Stopping Klocwork server [stopped]
```

Tip: On Windows, you can also stop the servers from the Start Menu. Click **Klocwork > Stop Klocwork Servers**.

Stopping the servers running as Windows services

When running the Klocwork servers as Windows Services, the Klocwork Server is dependent on the Database Server. This means:

- When you start or restart the Klocwork Server, the Database Server will also start.
- When you stop the Database Server, the Klocwork Server will also stop.

To stop one or more Klocwork servers running as Windows services, use the Windows Services Administration Control Panel.

Alternatively, use the following commands:

```
net stop "Klocwork 10.0 Server"
net stop "Klocwork 10.0 Database Server"
net stop "Klocwork 10.0 License Server"
```

kwservice

<yambe:breadcrumb self="kwservice">Command_Reference|Command reference</yambe:breadcrumb>kwservice administers the Klocwork Servers.

You can manage the Klocwork servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands locally.

For the remaining kwservice subcommands, the projects_root directory must be visible from the machine you're logged into.

Usage

```
kwservice [common-options] <subcommand> [options]
```

Example

```
kwservice --projects-root C:\Klocwork 10.0 Server\projects_root start license
```

Common options

Name (and short name)	Description
--help	display this help
--projects-root (-r)	path to projects_root directory where the servers are running. Mandatory for all kwservice commands.
--verbose	print verbose information about program execution, which can help to troubleshoot errors
--version	print version information

Examples variables

The examples in this article use the following variables:

- <server_name> can be one of:
    - database
    - license
    - klocwork
- <projects_root> is the projects_root where the servers are running

kwservice check

Use the kwservice check command to check the status of all of the Klocwork Servers, or an individual Klocwork Server.

Note for Windows: If you are running the Klocwork Servers as Windows Services, which is the default setup, you must use Windows Services administration to start, stop and check the Klocwork Servers, rather than kwservice.

Usage

```
kwservice --projects-root <projects_root> check [<server_name>]
```

Examples

To check the status of all Klocwork Servers:

```
kwservice --projects-root C:\Klocwork\projects_root check
```

To check the status of the License Server:

```
kwservice --projects-root C:\Klocwork\projects_root check license
```

kwservice get-service-properties

Use the kwservice get-service-properties command to view the host name and port number of the Klocwork servers.

Usage

```
kwservice --projects-root <projects_root> get-service-properties <server_name>
```

Examples

```
kwservice --projects-root C:\Klocwork\projects_root get-service-properties klocwork
```

kwservice list-services

Use this command to list the Klocwork Servers.

Usage

```
kwservice --projects-root <projects_root> list-services
```

Examples

```
kwservice --projects-root C:\Klocwork\projects_root list-services
```

kwservice restart

Use this command to stop and then restart all or individual Klocwork Servers in one step.

Note for Windows: If you are running the Klocwork Servers as Windows Services, which is the default, you must use Windows Services administration to start, stop and check the Klocwork Servers, rather than kwservice.

Note: You can manage the Klocwork Servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands servers locally.

Usage

```
kwservice --projects-root <projects_root> restart [<server_name>]
```

Examples

To restart all Klocwork Servers:

```
kwservice --projects-root C:\Klocwork\projects_root restart
```

To restart the License server:

```
kwservice --projects-root C:\Klocwork\projects_root restart license
```

kwservice set-service-property

Use this command to set properties for the Klocwork servers.

Note: You must stop the relevant server before running this command. See kwservice stop.

Usage

```
kwservice --projects-root <projects_root> set-service-property <server_name> <property> <value>
```

- <property> is one of the properties from the table below

Property	Description	Default value	Applies to these servers
host	the host name of the specified server	localhost	all
memory	The amount of memory available for the server. Must be a valid Java -Xmx value, for example 2G.	1G	Tomcat
port	the port number used by the specified server	License Server: 27000 Database Server: 3306 Klocwork Server: 8080	all

kwservice setup

Use this command to set up and initialize additional projects_root directories.

A single projects_root directory is created automatically during installation.

A projects_root directory is the data location for the Klocwork servers and applications. It contains Klocwork server settings and information about integration projects and build analysis runs. It also stores the Klocwork license file. The default location is `<Server_install>/projects_root`.

If you need to create additional projects_root directories, contact Klocwork Customer Support [2] for more information.

Usage

```
kwservice --projects-root <new_projects_root> setup [options]
```

where:

- <new_projects_root> is the path to the projects_root you want to create. Note that the parent directory of this directory must already exist.

Important: The maximum length of the path to the projects_root is 68-72 characters, depending on the length of the Database server (mysql) port number (1-5 digits).

Examples

```
kwservice --projects-root C:\Klocwork\projects_root_2 setup
```

Options

Name	Description
--license <arg>	specify the license file. Use this option to copy the specified license file to the new projects_root directory.
--old-pr <arg>	specify an existing projects_root directory. Use this option to copy server settings from an existing projects_root.

kwservice start

Use this command to start all or individual Klocwork Servers.

Note for Windows: If you are running the Klocwork Servers as Windows Services, which is the default setup, you must use Windows Services administration to start, stop and check the Klocwork Servers, rather than kwservice.

Note: You can manage the Klocwork Servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands on the servers locally.

Usage

```
kwservice --projects-root <projects_root> start [<server_name>]
```

Examples

To start all Klocwork Servers:

```
kwservice --projects-root C:\Klocwork\projects_root start
```

To start the Klocwork Server:

```
kwservice --projects-root C:\Klocwork\projects_root start klocwork
```

Note on migrate option

The *--migrate* option is used to migrate a projects_root from a previous version of Klocwork Insight. For information on upgrading, see Upgrading from a previous version.

kwservice stop

Use this command to stop all or individual Klocwork Servers.

Note for Windows: If you are running the Klocwork Servers as Windows Services, which is the default setup, you must use Windows Services administration to start, stop and check the Klocwork Servers, rather than kwservice.

Note: You can manage the Klocwork Servers remotely on Unix with SSH, or on Windows with Windows Services administration. Otherwise, you must issue the start, restart and stop commands servers locally.

Usage

```
kwservice --projects-root <projects_root> stop [<server_name>]
```

Examples

To stop all Klocwork Servers:

```
kwservice --projects-root C:\Klocwork\projects_root stop
```

To stop the Klocwork Server:

```
kwservice --projects-root C:\Klocwork\projects_root stop klocwork
```

Testing your installation

Unattended installation on Windows

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Installing in unattended mode

To run an unattended installation of Klocwork Insight, enter the following command:

```
start /WAIT <installer.exe> /w /S [/L<langid>] /v"/qn INSTALLDIR=<install_directory> /log <install_log> PROPERTY=VALUE PROPERTY1=VALUE1..."
```

where:

- <installer.exe> is the name of the installation package you want to use, for example, `kw-server-installer.10.0.0.0.windows.exe`
- /w parameter will cause the parent process to wait for the installation process. See the InstallShield help library [1] for more information on this.

    Note: The %errorlevel% system variable can be used to check for installation success.

- /L<langid> allows you to change the default language for the installation package. By default, if your system locale is Japanese, the installation package will run in Japanese. Otherwise, it will run in English. To specify Japanese, use /L1041.
- /v passes subsequent parameters directly to the MSI engine. The entire string after /v must be surrounded by quotation marks.
- /qn runs the installer in unattended mode
- <install_directory> is the absolute path to the directory in which you want to install Klocwork Insight. The default is the root directory of the local drive with the most available space.
    `%LOCAL_DRIVE%\Klocwork\<package>`, where <package> can be Server or one of the desktop packages. Note that if the chosen directory is not empty, you will not be able to continue with the installation.
- PROPERTY=VALUE is any of the Allowable PROPERTY=VALUE pairs for unattended installation

Note: Surround any value that contains spaces with escaped quotation marks (\").

Example

```
start /WAIT kw-server-installer.10.0.0.0.windows.exe /w /S /v"/qn INSTALLDIR=\"D:\Klocwork\Server 10.0\" /log C:\server.log"
```

Installing a desktop analysis tool

You can install the desktop analysis tools using unattended installation, however you must first download the desktop tools package from http://developer.klocwork.com/support/downloads (see **Desktop Tools Packages**) and unzip them into a folder on your local machine. The desktop tools package contains installation binaries for each of the desktop tools, organized by platform. For more information see, Downloading and deploying the desktop analysis plug-ins.

Once unzipped and placed into a directory on your local computer, run the unattended installation from the command-line, specifying the file name of the installer for the desktop tool that you want to install. In the following example, the IntelliJ IDEA plug-in is installed into a custom directory.

Example

```
start /WAIT kw-insight-idea-installer.windows.exe  /w /S /v"/qn INSTALLDIR=\"C:\kw\idea_plugin\" /log C:\idea_install.log"
```

Installing specific components in unattended mode

To install one or more specific Klocwork Insight components (for example, to install the database server) in an unattended installation, include ADDLOCAL=<component_arguments> in your command line, where <component_arguments> is one or more arguments from the following tables. Multiple arguments must be separated by commas.

To install this Server component (feature)...	...enter the argument...
License Server	LicenseServer
Klocwork Server	KlocworkServer
Administration and analysis management tools	BuildTools

Allowable PROPERTY=VALUE pairs for unattended installation

Server package

PROPERTY=VALUE	Description
ADDLOCAL=<component_list>	Installs specific components only. See tables in previous section for allowable values for this property.
INSTALLDIR=<install_directory>	Install into the directory you specify. Default: current working directory. Note that if the chosen directory is not empty, you will not be able to continue with the installation.
PROJECTS_ROOT=<projects_root_directory>	Set up a projects_root directory in the directory you specify. The default is `<Server_install>/projects_root`. Specify the complete path. **IMPORTANT**: If you are upgrading, specify the **old** projects_root directory that you want to migrate.
LICENSE_HOST=<host_name>	Specify License Server host name. Default: localhost
LICENSE_PORT=<port_number>	Specify License Server port number. Default: 27000
MYSQL_HOST=<host_name>	Specify Database Server host name. Default: localhost
MYSQL_PORT=<port_number>	Specify Database Server port number. Default: 3306
KWSERVER_HOST=<host_name>	Specify Klocwork Server host name. Default: localhost
KWSERVER_PORT=<port_number>	Specify Klocwork Server port number. Default: 8080
USE_SSL=1	To use a secure Klocwork Server connection, set this value to 1. Default: 0

Note: The Server Installer also supports the ALLUSERS property. For details, see this MSDN article [2].

Desktop plugins

Name	Description
ADDLOCAL=<component_arguments>	Installs specific components only. See tables in previous section for allowable values for this property.
CREATE_SHORTCUTS=\"\"	Suppress creation of desktop shortcuts. Default: 1 (create shortcuts)
IDEAINSTALLDIR= <directory>	The directory where IntelliJ IDEA is installed
INSTALLDIR=<directory>	Install into the directory you specify. Default: current working directory. Note that if the chosen directory is not empty, you will not be able to continue with the installation.
LICENSE_HOST=<host_name>	Use License Server running at <host_name>
LICENSE_PORT=<port_number>	Use License Server running at <port_number>
KWSERVER_HOST=<host_name>	Use Klocwork Server running at <host_name>
KWSERVER_PORT=<port_number>	Use Klocwork Server running at <port_number>
USE_SSL=1	To use a secure Klocwork Server connection, set this value to 1. Default: 0

References

[1] http://kb.flexerasoftware.com/doc/Helpnet/installshield12helplib/IHelpSetup_EXECmdLine.htm#wp1021859

[2] http://msdn.microsoft.com/en-us/library/aa371865(VS.85).aspx

Testing your installation

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>To test your Klocwork installation, you can either use the sample project 'demosthenes', or create and analyze your own sample project.

Using demothenes

In `<Klocwork_install>\samples`, you can find the Demosthenes sample project (a sample C/C++ project).

This directory contains a sample project and a readme file that shows you how to set up some sample analyses you can use to explore or demonstrate Klocwork.

Note: To successfully build a sample project on Unix you should have GNU make, GCC and bash.

Create and analyze a sample project

To test your Server package installation, you can create and analyze a sample project and then view the results of your analysis in Klocwork Review:

- C/C++ integration build analysis - Cheat sheet
- Java integration build analysis - Cheat sheet
- C# integration build analysis - Cheat sheet

What to communicate to the team

<yambe:breadcrumb>Installing Klocwork Insight|Installation</yambe:breadcrumb>Your team of developers, managers, build engineers(s) and administrator(s) need to know the following:

- the URL of the Klocwork Server, so that managers and developers can access Klocwork Review and Klocwork Cahoots, and install their own desktop analysis plug-ins
- that the URL of the Klocwork Server with "/documentation" added to it will give them all of the Klocwork online documentation
- the location of the projects_root directory (Klocwork administrators only)
- the host and port of the License Server
- who has permission to start and stop the Klocwork Servers, under what user ID, and, for Windows, whether the servers must be managed as Windows Services

If anyone else needs to access the database, for example, to do backups, and you have locked the database with a password, give the person the password. See Setting a password for the Klocwork database for more information.

Troubleshooting

Error reading setup initialization file during installation

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb> If you see the following error during installation on Windows:

> Error reading setup initialization file

Ensure that your Windows system drive (normally the C: drive) has free space. The Windows installer requires space on the system drive, even if you install Klocwork on a different drive.

Repairing a Windows installation of Klocwork Insight

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>If files in the Klocwork installation were accidentally damaged or deleted, you can repair the installation.

You may discover that your Klocwork installation is damaged, for example, if you are attempting to uninstall Klocwork and see the error message "Fatal error: Cannot uninstall".

If this occurs, click **OK** in the error message dialog to cancel the uninstallation, perform the following repair procedure, and then run the uninstallation procedure again.

To repair a Klocwork installation on Windows:

1. In the Start menu, click **Control Panel > Add or Remove Programs**.

    The Add or Remove Programs dialog appears.
2. Select the Klocwork package you want to repair, and select **Click here for support information**.

    The Support Info dialog for the selected Klocwork package appears.
3. Click **Repair**.

    The installation is restored to a clean state.

See also:

- Uninstalling Klocwork Insight
- Installing Klocwork Insight
- Troubleshooting

Find Klocwork Servers running on your LAN

<yambe:breadcrumb self="kwdiscover">Command_Reference|Command reference</yambe:breadcrumb>The kwdiscover command allows you to find instances of the Klocwork Servers running within your local area network. This tool can be helpful when you don't know the host name and port number for the Klocwork Server you want to connect to.

Notes

- Only running servers are detected.
- Only Klocwork Insight 9.1 and later servers are detected.

SYNOPSIS

```
kwdiscover
```

Sample output

```
Klocwork Server (version 10.0.0.9) [running on serverxyz:8074]
Klocwork Server (version 10.0.0.9) [running on serverabc:8080]
```

OPTIONS

Name	Short name	Description
--help		display help
--verbose	-v	print verbose information about program execution, which can help to troubleshoot errors
--version		display tool version

See also

- Troubleshooting

Unable to start the Database Server because the path to the socket file is too long

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>If the path to the socket file (including separators and the name of the socket file) is greater than 107 characters, you will be unable to start the Klocwork Database Server. The database log will indicate that this is the problem.

The socket file is located in the following directory:

```
<projects_root>/locks
```

To remedy this situation, move your projects to another projects_root with a path length of less than 68-72 characters, depending on the length of the Database Server port number (which can be 1 to 5 characters).

For help moving a projects_root, see Moving or creating additional projects_root directories.

Unable to start Klocwork Servers following Windows installation

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb> If you see one of the following messages after installing the Klocwork Server package on Windows:

- Error 1920. Service Klocwork 10.0 Server (Klocwork 10.0 Server) failed to start. Verify that you have sufficient privileges to start system services.

- Service Klocwork 10.0 License Server failed to start. See installation log for more details.

An earlier version of the Klocwork Server and/or Klocwork License Server may be running on the port that you specified during installation of Insight 10.0. It is not possible to run two versions of a server on the same port.

You need to set a different port number for the 10.0 Klocwork Server and/or 10.0 Klocwork License Server with kwservice set-service-property, and then start the servers.

See also

- Installing Klocwork Insight

Database connection error

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb>**IMPORTANT:** Due to MySQL limitations, the projects_root directory should not be located on NFS. It has a special file locking implementation which is not fully supported by MySQL. See also the warning in the MySQL documentation [1].

If you see the following error:

Error occurred while connecting to database: Database connection to <database> refused: Communications link failure due to underlying exception

Check the host name in the error message. If the host name is not a fully qualified host name that includes the domain (for example, server1.klocwork.com), you need to set the fully qualified domain name for the Database Server.

To do this:

1. Stop the Database Server:

```
kwservice --projects-root <projects_root> stop database
```

2. Run the following command:

```
 kwservice --projects-root <projects_root> set-service-property database host <fully-qualified-host-name>
```

> For example:

```
kwservice --projects-root C:\Klocwork\projects_root set-service-property database host server1.klocwork.com
```

3. Start the Database Server:

```
kwservice --projects-root <projects_root> start database
```

Package Load Failure occurs in Visual Studio after I install patch

<yambe:breadcrumb>Visual Studio troubleshooting</yambe:breadcrumb>You can either:

- uninstall the patch and install the last full version of the Klocwork desktop analysis installer, or
- from the `<VS_user_install>\inforceVSNET` directory, run the following command:

```
regsvr32 IfPkgVS2005.dll
```

IntelliJ IDEA installation not detected; plugin not installed

<yambe:breadcrumb>Getting started with Klocwork Desktop Java Plug-in for IntelliJ IDEA|IntelliJ IDEA</yambe:breadcrumb>

Installation troubleshooting

- Running a custom installation for new or upgraded IDEs

Connection troubleshooting

- Klocwork clients cannot connect to Klocwork Server
- Desktop synchronization troubleshooting

Desktop analysis troubleshooting

- Cannot start analysis - the JDK is not specified for selected modules (IntelliJ IDEA)
- Accessing your desktop build.log and parse_errors.log

Licensing troubleshooting

- Desktop licensing problems

Memory problems

- Java memory problems when running Klocwork applications

Issue-citing troubleshooting

- Can't change issue status on desktop

Limitations for installation

These release notes cover Klocwork Insight 10.0 and Klocwork Cahoots. For new features in this version, see What's New.

Changes affecting migration

This section details product changes that affect how Insight data is migrated from a previous version. For general information on upgrading, see Upgrading from a previous version.

Japanese for migrated projects: To display Japanese issue messages, traceback and context-sensitive issue help for a migrated project, set the "locale" project property to "ja" with the kwadmin set-project-property command. Then, run kwbuildproject with the *--url* option so that the project properties are used in the analysis. Note that Insight will display Japanese issue messages and traceback only for issues that are detected in a Japanese build (that is, a build run on a machine with the system locale set to Japanese). Other issues will remain in English (until they are detected in a Japanese build).

Disabled checkers: If you chose to migrate your projects_root directory, make sure you have the same checker configuration as in the last release before your first 10.0 integration build analysis.

Migrating from 9.2 to 10.0

When migrating from 9.2 to 10.0, statuses of local defects which have been synchronized with the server, but not detected by system builds, will be lost.

Changed and removed commands and options

The following table lists changed and removed commands in this release. For more detail on Klocwork commands, see Command Reference.

Important: These changes can affect existing scripts.

Command	Details
kwstackoverflow	Due to the complexity and accuracy of kwstackoverflow, we have discontinued this product. In the future, we will work towards a unified stack analysis tool that works with our existing products.
kwdspparser	Added the --useenv option which allows you to use PATH, INCLUDE, LIBPATH and LIB environment variables instead of Visual Studio variables.
kwinspectreport	This command has been removed. You can now save reports using the Web API.
kwsupport	This command has been removed. You can now collect data and submit to Klocwork Support for additional help with build errors using the kwcollect command.

Changes to system requirements

This section lists changes to the System requirements.

Added

Platforms

- Windows 8
- Windows Server 2012
- Sun Solaris 11

IDEs

- Eclipse 4.3

Browsers

- Internet Explorer 10

No longer supported

Platforms

- Sun Solaris 9

Changes affecting existing users

This section details changes that you should be aware of if you've used a previous version of Insight. See also What's New for a summary of major new features in this version.

Klocwork Architect removed

Klocwork Architect has been removed and is no longer a part of the Klocwork Insight package.

Due to the removal of Klocwork Architect, support for usage rules (.uconf) files has also been removed and these file types should no longer be used.

See Integrating with Structure101 for information on using Structure101, a code visualization and organization tool that now integrates fully with Insight.

Licensing changes

9.x licenses are not compatible with Insight 10.0. You must get a new license to use the latest version of the product. Contact Klocwork Customer Support [2] for more details.

Changes to Klocwork Review

- You can now create custom dashboard reports in Klocwork Review. See What's New for more details.
- We've split the Configuration Editor into two separate editors. For more information, see Configuring checkers for the integration build analysis.
- You can now use Klocwork Review to import existing projects, server configuration settings, and code reviews into your new projects_root. See Import your existing projects into a new projects root for more information.

Changes to Klocwork Cahoots

- The Klocwork Cahoots documentation has moved.
- You can create custom reports in Klocwork Cahoots. See the Cahoots documentation for more details.
- The JSON output from the `search` action of the code review Web API has changed. Redundant fields were removed from the root of the output reply. The following listing shows a typical JSON output response:

```
{
    "type": "action",
    "item": {
        "author": "jdoe",
        "responsible": "pholmes",
        "creation_date": 1376328066170,
        "file_revision": {
            "file": "a.c",
            "is_directory": false,
            "is_binary": false,
            "change_type": "MODIFIED",
            "removed_lines": -1,
            "added_lines": -1,
            "file_revision_id": 1
        },
        "line": 3,
        "text": "find a way to fix this",
        "complete": false
    }
}
```

Changes to access control

- You can now enable authentication when you use basic access control. This allows you to decide if users need to login with a password to access projects (authentication enabled) or can simply see all projects by logging in with any user name (authentication disabled). For more information, see enabling authentication.
- A guest account has been added which allows anyone to login with the username 'guest' and have developer access rights. For more information, see Managing the Guest account .

Changes to desktop analysis

- Klocwork Insight now integrates with IncrediBuild 4.6. The IncrediBuild integration now runs on 64 bit Java VMs. See Running Insight in an IncrediBuild environment for further details.
- The Klocwork Desktop Plugin for Visual Studio now generates a build specification on a per-project basis, using the Visual Studio project configuration. In previous versions of Klocwork Insight, the build specification was generated on a per-project basis, using the active Visual Studio solution configuration.

Changes to the Configuration Editor

- The Configuration Editor is no longer used to edit taxonomies and categories; this is now done using the Taxonomy Editor.
- `.pconf.xml` configuration files are now split into `.pconf` (Configuration) and `.tconf` (Taxonomy) files.
- If you import old configuration files, they will be split into separate `.pconf` and `.tconf` files. The same occurs during migration.

Changes to the Klocwork Servers

- You must pass the `--projects_root` (or `-r`) argument to the kwservice command when specifying the location of your projects_root. In previous releases, this argument was implied when the path to your projects_root was passed as an argument.

Changes to MySQL integration with Klocwork Insight

- Use of an external MySQL server with Klocwork Insight is no longer supported.

Known limitations

Limitations for installation, upgrade and deployment

Some virus scanners may slow analysis performance

If certain virus scanners are deployed (such as Trend Micro Worry-Free Business Security 6.0), your analysis time may increase.

Workaround: If your anti-virus software permits, configure exclusion folders for the projects_root directory and the tables directory.

Interoperability between releases

Insight clients earlier than Klocwork Insight 10.0 cannot interoperate with a Klocwork Insight 10.0 Server. You must upgrade both your Server and User installations. See Upgrading from a previous version.

Only one set of Klocwork Insight 10.0 Servers can be run as Windows Services on each host

It is not possible to run two sets of the Klocwork Servers as Windows Services on one host when the servers are of the same Klocwork version.

Workaround: Start additional instances of the Klocwork Insight 10.0 servers using kwservice (and set the ports appropriately, so that there is no conflict).

Users may not be able to connect to the Klocwork Servers if Server host machine is brought out of hibernation mode

Windows only, when not running Klocwork Servers as Windows Services: Users may not be able to connect to the Klocwork Servers if the machine hosting the Klocwork Servers is brought back from hibernation mode. Restarting the Klocwork Servers does not help this problem.

Workaround: Log off the machine hosting the Klocwork servers and log in again, or restart the server host machine. Alternatively, run the Klocwork Servers as Windows Services.

Remote Klocwork clients may not be able to connect when Klocwork Servers are started on "localhost"

Linux and Solaris only: If you start the Klocwork Servers on a machine where the `/etc/hosts` file contains an alias that maps the host name to localhost address 127.0.0.x, remote Klocwork Insight clients will not be able to connect to the servers.

Workaround: Remove the alias to 127.0.0.x from `/etc/hosts` and restart the servers.

Projects_root directory cannot be located on a shared file system (NFS)

Unix only: Due to MySQL limitations, the projects_root directory should not be located on NFS. It has a special file locking implementation which is not fully supported by MySQL. See also the warning in the MySQL documentation [1].

NIC naming convention em[123...] not supported

The NIC naming convention on Fedora Core 15 is em[123...] by default, which is not supported by Insight.

Workaround: Configure NIC as eth[0123...], which is supported by Insight.

Limitations for Checker configuration migration

Note the following limitations with checker configuration files during the upgrade process (via the import process):

- Only modifications to default checker configuration files are imported. If you had a non-default checker enabled in an earlier installation and it was renamed in a new version, you will not see the checker in new builds. You must manually re-enable the checker in the new version of Insight.
- If a checker that was enabled by default was renamed in the new version of Insight, you will not see new codes until the first system build of the new installation.

Limitation for importing projects with existing reports

If you attempt to import a project with existing reports that use default metric names, you may see unexpected results.

Workaround: When importing a project, ensure that the reports do not use default metric names.

We hit StackOverflowError in MySQL driver

If you see this message in the Klocwork Server log during or after installation, it indicates that there are unclosed connections in the server's database. You may also experience a subsequent failure when importing projects from your existing server. If your import operation fails with "Too many open connections", you should restart your source server or wait an hour so that your MySQL server can evict any unclosed connections.

Support for desktop project migration of 8.x versions of Klocwork Insight has been removed

If you run kwcheck on an 8.x `.kwlp` file, your previously detected defects will not show up.

On Linux, when importing projects with large numbers of builds, make sure your ulimit value is set accordingly

If your projects contain a large number of builds, set your `ulimit` value to an appropriate number determined roughly by the following formula:

```
"ulimit -n" > max(number of builds in a project) + 1000
```

For example, if your project contains 500 or more builds and is failing during import, set your `ulimit` value to 2048.

Eclipse update site fails when downloading from a secure server

Due to an Eclipse security feature, you cannot download a plug-in from a secure server (https).

Workaround: The Klocwork Administrator must make the Eclipse update site package available to all users as an archive.

You must have the Microsoft .NET 4.0 Framework installed in order to run Windows services

This framework is installed by default as part of Windows 8. For all other versions of Windows, you must download the Microsoft .NET 4.0 Framework Installer [2] and install the framework manually.

Before downgrading to a previous version of Insight, you should uninstall the current release

To avoid duplicate entries in the Windows Control Panel, and incorrect plug-in version numbers in your IDEs, it's a good idea to uninstall the current version of Klocwork Insight before downgrading to a previous version.

Uninstall any existing Klocwork user package before installing the latest 10.X desktop analysis plug-ins

You must uninstall any existing Klocwork user package from an earlier version of the product (9.2, 9.5, or 9.6) before installing the latest version (10.X) of the desktop analysis plug-in.

During installation, you may encounter an error indicating that a previous version of the Klocwork user package is installed on your computer, even if the user package has been removed. If you see this error, verify that the existing package has been removed. If the error persists after the user package component has been removed from your computer, then you may need to re-install or repair your existing user package installation, then uninstall again.

Limitations for Mac OS X support

- Distributed Analysis is not supported.
- For developers, plug-in support is provided for Eclipse and IntelliJ IDEA. If your developers are not using Eclipse or IntelliJ IDEA, they need to use Klocwork Desktop Command Line for C/C++ or Java (kwcheck) or Klocwork Desktop to analyze their code and view detected issues. See Fixing issues before check-in with Klocwork Desktop Analysis.

Limitations related to internationalization and localization

See also:

- Localization details
- Klocwork support for non-ASCII encoding

Japanese version of Insight

The following are not localized in Insight 10.0:

- the IntelliJ IDEA plug-in (because IntelliJ IDEA does not provide a Japanese version of the IDE)
- The MISRA checker help, because MISRA does not provide a translated version

Unix, using dash: Cannot start servers on projects_root containing non-ASCII characters

When using dash (the default shell on Ubuntu), it is not possible to start the Klocwork Servers on a projects_root with Japanese characters in the path. This is due to a dash limitation related to improper handling of multibyte characters. This problem exists for Ubuntu 10.10 only.

Workaround: Use a different shell, for example bash.

Installation path cannot contain multibyte characters

If you attempt to install to a path containing multibyte characters on any platform, the installation may fail or cause unexpected results when you use the product.

Workaround: Ensure that the path to the chosen installation directory contains only ASCII characters.

Do not use non-ASCII, double-byte characters (e.g. Japanese) to specify the name of your projects_root

Using Japanese or other non-ASCII, double-byte characters to specify your projects_root will cause failures.

Workaround: Use ASCII characters to specify your projects_root.

Visual Studio cannot connect to the Klocwork server if multi-byte characters are in the host name

If your host name contains multi-byte characters (e.g. Japanese) and you attempt to connect to it in Visual Studio, you will be unable to connect to the host.

Workaround: Do not try to connect to a server that contains non-ASCII characters. Alternatively, you can use the ASCII representation of the multi-byte host name instead.

Offline product documentation may not load if double-byte characters are used to specify the hostname of the server

In some cases, the offline help may not load correctly if you used double-byte characters to specify the hostname of your server. This may be caused by your DNS configuration settings or settings related to your browser or operating system.

Workaround: Use ASCII characters to specify your hostname, check your DNS configuration settings, or use the online product documentation at www.klocwork.com [3]

Cannot set up or submit a code review if Perforce Depot or Visual Studio workspace contain Japanese characters

Workaround: Use ASCII characters to specify both your P4 depot name and your Visual Studio workspace, or use a unicode enabled Perforce server.

Limitations for build integration

Must specify full path to devenv when running kwinject in 4NT shell

Even if the Microsoft Visual Studio build command devenv is in your path, kwinject will not produce a build specification when run in a 4NT shell unless you specify the full path to the devenv tool. 4NT is a non-default command shell for Windows.

Workaround: Specify the full path to devenv when running kwinject in a 4NT shell.

Limitation for support of IAR Systems C compiler

Klocwork Insight does not process the following compiler option for the IAR Systems C compiler, icc8051:

-G. Opens standard input as source, instead of reading source from a file.

Workaround: If your build uses this option, there are two alternatives:

- Ignore these compilations. The code that is being piped through standard input will not be analyzed in the Klocwork build (this is what kwinject does by default).
- Save the source code to a file and run icc8051 with the source file as input.

Cannot specify symbolic link as command when running kwinject under Cygwin

When running kwinject under Cygwin, it is not possible to specify a symbolic link as the command argument for kwinject.

kwscm svn issue with GNOME keyring support

When switching between 32-bit and 64-bit Java, `kwscm svn` authentication may become unstable. This is related to GNOME keyring support.

Workaround: After switching Java VMs, back up your existing authentication keys, and allow the system to regenerate new ones for you:

1. $ cd ~/gnome2/keyrings/
2. $ mv login.keyring login.keyring.backup
3. $ mv default default.backup
4. $ mv default.keyring default.keyring.backup

kwgradle: the root project `build.gradle` script must be writeable

Ensure that the `build.gradle` build file is in a location that can be written to.

Cannot load Android 4.4 (KitKat) using the default memory settings for kwloaddb, kwadmin and kwjava

Linux users building the Android platform, specifically Kit-Kat version 4.4, may need to increase the Java heap parameters (-Xmx) for several tools. In particular `bin/kwjava`, `bin/kwloaddb`, and `bin/kwadmin`. Suggested values for building Android are `-Xmx1G` for kwloaddb and kwadmin, and

`-Xmx4G` for kwjava.

Limitations for Klocwork analysis

Limitations for C# analysis

Klocwork's C# analysis is supported only on Windows.

Writing custom checkers is not supported for C# projects.

The following features are not supported for C# integration projects:

Feature	Details
Build integration	• kwinject cannot be used to create a build specification for a C# project. Instead, use kwcsprojparser. • Build specification templates
Integration build analysis	• Metrics Note that the metrics reported for C# projects cannot be considered accurate. • Mixed-language projects (you need to create one C/C++ project and one C# project) • Parallel analysis • Incremental analysis
Klocwork Review	• "Show implementation", "Show declaration", and Source Cross-Reference • The Complexity Details and Metrics reports cannot be considered accurate • The Project Configuration report does not show lines of code, comments or total number of entities, functions/methods or classes/types • The Category Details report does not display lines of code or issue density
Distributed analysis	Distributed analysis is not supported for C#.

The following features are not supported for C# desktop analysis:

- On-the-fly analysis
- Parallel analysis
- Incremental analysis
- File-level analysis in Visual Studio (only solutions and projects can be analyzed)
- Using metric thresholds and knowledge bases

Windows Indexer or antivirus program accesses temporary MySQL files, causing table loading to fail

During the table-loading phase, MySQL makes temporary files. If Windows Indexer is running or your antivirus program is running a real-time scan, these programs may try to access your temporary MySQL files, locking them, and causing table loading to fail.

Workaround:

Create a separate directory to contain temporary MySQL files, and then:

1. Configure Windows Indexer or the antivirus software to ignore the directory.
2. Access the non-default MySQL configuration file, located at:

    `<Server_install>/config/kwmysql.ini`
3. In the `<kwmysql.ini>` file, add:

    `tmpdir=<path_to_exempt_directory>`

    Note: Backslashes should be doubled when specifying a Windows folder path. Windows example: `"C:\\temp\\exempt"`
4. Restart the Klocwork Database Server.

For projects containing JSP files, specifying a Windows UNC path to the tables directory generates error

When analyzing a project containing JSP files, if you specify a Windows UNC path to the output tables directory (for example, `\\ComputerName\SharedFolder\Resource`), you may see errors such as "No Java files were created by jsp converter". This is due to an Apache Tomcat limitation.

Workaround: Specify a non-UNC path to the tables directory (map the network share to a drive).

"Tracker" plug-in for GNOME may cause performance drop in full analysis

Unix only: Running the Tracker search tool for GNOME may significantly slow a full Klocwork analysis.

Workaround: Disable Tracker when running a Klocwork analysis.

Database loading phase may fail if using IPv6

kwadmin may generate the message "Database loading stage failed" during the database loading phase if you are using IPv6.

Workaround: Add the fully qualified host name to the database.host property. To do this:

1. Open `<projects_root>/config/admin.conf` in a text editor.
2. Add the fully qualified host name to the line beginning `database.host=`. For example:

        database.host=myserver

   should be changed to:

        database.host=myserver.klocwork.com

3. Restart the Klocwork servers.
4. Restart the Klocwork analysis.

Limitations for Klocwork Desktop Analysis

Limitations for the Visual Studio plug-in

Klocwork C/C++ compiler does not parse files compiled with /CLR option

Visual Studio 2005 and 2008 allow you to create a C++ project with files that use Microsoft's managed C++ extensions. The Klocwork C/C++ compiler (kwcc) does not parse files compiled with the /CLR option. It issues a warning that the compiler skipped parsing of these files because of the use of managed extensions. This warning is included in build summary statements that count warnings and errors.

The build specification tools kwvcprojparser and kwinject add entries for all C++ files, but they report the number of files that will be skipped during an analysis (if any), as well as the total number of files added to the build specification.

Limitations for the Eclipse plug-ins

Toolbar on Klocwork Insight views doesn't display properly on 64-bit Ubuntu

Versions of 64-bit Eclipse previous to 3.5.3 may not display tools such as *Configure filters* on Klocwork Insight views on Ubuntu.

Workaround: Close and re-open Eclipse.

Eclipse 3.6.0 with LDAP crashes if Reviewers field is clicked after selecting a reviewer name

When using LDAP access control: If you type a partial user name in the Reviewers edit box in the **Create Code Review** dialog, the matches are displayed in a box. If you then select a user from that list with a single click and proceed to click the Reviewers edit box, Eclipse will crash.

Workaround: Upgrade to Eclipse 3.6.1 or later to solve this issue, or use the arrow keys and Enter to select a reviewer.

Limitations for the IntelliJ IDEA plug-in

IntelliJ IDEA plug-in not available in Japanese

IntelliJ IDEA is not localized for Japanese, so the Insight plug-in for IntelliJ IDEA is not available in Japanese. Likewise, the Japanese documentation is not available from the IntelliJ IDEA plug-in.

Workaround: To access the Japanese documentation, go to http(s)://<klocwork_server_host>:<klocwork_server_port>/, select **ja** in the drop-down menu, open Klocwork Review and click **Help**. Or use the Japanese Documentation Wiki [4].

Cannot access issue help from IntelliJ IDEA 11.1.1 or 11.1.2

Issue help for IntelliJ IDEA 11.1.1 and 11.1.2 cannot be accessed by right-clicking an issue in the issue list and selecting **Show help** or by pressing F1.

Workaround: IDEA bug that blocks access to third-party plug-in help, such as that provided by Klocwork Insight, has been fixed by JetBrains in version 11.1.3, details available at http://youtrack.jetbrains.com/issue/IDEA-87389.Previous versions of IntelliJ IDEA appear unaffected.

Klocwork icons may not appear on menu bars in IntelliJ IDEA 12

In IntelliJ IDEA 12, depending on the version of JDK installed on your system, icons may not appear on the menu bar. This is a known IntelliJ IDEA issue.

Workaround: Install the latest version of the Java JDK.

Limitations for Klocwork Desktop

Project name not saved when using non-default location

When creating a project in a non-default location, the project name is not saved.

Workaround: Repeat your project name in the *Project Location* field.

Limitations for Klocwork Extensibility

C/C++ Path checker compilation makefile compatibility

The makefile generated by kwcreatechecker on Unix systems requires GNU make to build the checker. The default make installed on non-GNU systems such as AIX or Solaris may not compile Klocwork extensions for C/C++. On Windows, the makefile generated by kwcreatechecker requires nmake to build the checker.

Workaround: None.

Checker Studio cannot represent non-standard header files

Errors will be printed in the Output window of Checker Studio when the AST is generated for source code that contains non-standard header files.

Workaround: Use self-contained examples that do not rely on external includes in Checker Studio.

Analysis fails if Java KAST custom checker was built using a version 1.7 JDK

If you use JDK version to build custom Java KAST checkers, the Insight analysis will fail during the `kwjava` phase:

```
Tue Jan 10 11:19:54 EST 2012: Running Java compilation stage...

Error occurred during build: kwjava returned 1
```

Workaround: Build Java KAST checkers using JDK version 1.6.

Limitations for Klocwork Review

Multi-word entity search highlighting not supported

Entity highlighting in the Source Viewer works only for single words.

Workaround: None.

Issue status change history difficult to view if user name is very long

If a user's name is very long, the status change history dialog spills outside the browser window.

Workaround: None.

Header Analysis in Klocwork Review no longer supported

Klocwork Insight 9.2 was the last release in which Header Analysis was supported. With the introduction of Header Analysis refactoring in Eclipse, our focus is switching from reporting Header Analysis problems to preventing them. For more information, see Klocwork Refactoring.

Internet Explorer cannot list project names if Klocwork Server host name contains underscore

Klocwork Review uses cookies to handle session authentication. Internet Explorer will not save cookies for domains containing an underscore.

Workaround:

There are three options:

- Change the Klocwork Server domain name to use only alphanumeric characters
- Have Internet Explorer users open Klocwork Review using the IP address of the Klocwork Server
- Create a domain alias for Internet Explorer users

Klocwork Review and Klocwork Cahoots user names are case sensitive

If the Klocwork Server is running on a **Windows** machine, users who log in to Klocwork Review and Klocwork Cahoots have a license checked out using the lowercase form of their user name. Other tools will not change the case of the user name (obtained from the OS), so a second license is checked out.

Workaround: Use a lowercase user name.

If the Klocwork Server is running on a **non-Windows** machine, users who log in to Klocwork Review and Klocwork Cahoots have a license checked out using the case as entered in the Login dialog. As above, other Klocwork tools use the user name as obtained from the OS.

Workaround: Match the user name case used by your OS.

Cannot use the *Remember me* option on a server with multiple server instances

If you are running multiple server instances on the same server (for example, klocwork.example.com:8080 and klocwork.example.com:8072) and log in to each server with different credentials (for example, you use jsmith to log into the server on port 8080 and jdoe to log into the server on port 8072), the "Remember me" feature does not work properly. The authentication key is stored in a browser cookie and can only be stored for a domain (the port cannot be specified).

Workaround:

There are two options:

- For the first server, access the site using the normal domain name (for example, jdoe1.klocwork.com:8080); on the second, use the IP address of the Klocwork Server instead of the domain name (for example, 10.0.145.7:8070).
- Set up a domain alias for the second server (either locally via your hosts file, or by setting it up globally).

Can't edit custom folder names for Klocwork Review reports

If you create a report and put it in a new folder, there is no way to rename that folder later.

Workaround: If there is a single report in that folder, click **edit** for the report and change the folder name. If there are multiple reports in the same folder, repeat this for each report until they have all moved to the new folder. Once they have all been moved, the old folder will disappear from the list.

Can't search for Severities in Klocwork Review

If your saved searches for severities appear in the wrong language, the search will not display the expected results.

Workaround: Log in to Review with the locale used during the project build and your saved searches will update to the correct language. Searching for severities will now work as expected.

Middle-clicking a link doesn't open it in a new tab when using Google Chrome

Due to a bug in Google Chrome, some links do not open in a new tab when they are middle clicked, shift-clicked or ctrl-clicked after the first time the link is opened in this manner. Each successive attempt simply opens the link within the active tab. For more information, see http://code.google.com/p/chromium/issues/detail?id=177502

Workaround: Refresh the page and this will allow you to open the link in a new tab the first time you attempt it.

JVM argument passing limitation (Windows only)

On Windows, when you specify a command line argument to a Java application that ends with \" (back-slash+double-quote), the JVM strips both the backslash and the quote from the argument. For example, specifying -r "myname\,othername\" will result in 'myname\' and 'othername' being added as reviewers instead of 'othername\' as expected.

Workarounds:

- wrap each name with single quotes or,
- escape the last backslash. For example:

```
-r "othername\"
```

becomes:

```
-r "othername\\"
```

This is a Windows JVM known issue.

Import status may not be accurately reflected in the Projects view

During the import process, while projects are actively being imported, issue information in the **Projects** view may not accurately reflect the data in the source project. Information in the **Projects** view will be updated as soon as the import operation has completed.

Limitations for user documentation

Documentation for C/C++ custom Path checkers

Documentation for custom C/C++ Path checkers is not provided on this site. If you think you need to create a custom Path checker for C/C++, please contact Klocwork Customer Support [2] so that we can guide you in the creation process and provide documentation.

Some links in online help return a "Cannot display the web page" error if not connected to internet

In Eclipse, Visual Studio, and Klocwork Desktop, if you are not connected to the internet, clicking on some links in the online help will return a "Cannot display the web page" error. To reduce the size of the online help file, not all help pages are packaged with these tools.

Workaround: Connect to the internet to view these pages in the Documentation Wiki.

Must enable cookies in Internet Explorer to log in to Documentation Wiki from Eclipse plug-in or Klocwork Desktop on Windows

Windows only: If you do not have cookies enabled in Internet Explorer, you will not be able to log in to the Documentation Wiki from the plug-in for Eclipse or from Klocwork Desktop. Note that login is required only for editing pages on the Doc Wiki.

Workaround: Because Eclipse and Klocwork Desktop use Internet Explorer for help browsing, you need to enable cookies in Internet Explorer.

URLs to external sites don't work in the help for IntelliJ IDEA

It's not possible to navigate to external URLs from the help in IntelliJ IDEA.

Workaround: Use the Documentation Wiki at http://www.klocwork.com/products/documentation/current/ to navigate to these pages.

PDF links don't work in the help for IntelliJ IDEA

If you click a link to a PDF in the help for IntelliJ IDEA, the file name displays as a title in the right pane, but there's no text. This is an issue for users trying to access the C/C++ extensibility reference manuals.

Workaround: You can access the Klocwork C/C++ AST API Reference and Klocwork C/C++ Path API Reference PDFs from the Reference page [5] on the Documentation Wiki.

Help links for detected issues don't work in IntelliJ IDEA 11.1

If you click **Show help** for a selected issue in IntelliJ IDEA 11.1, an error is shown.

Workaround: Use the Documentation Wiki at http://www.klocwork.com/products/documentation/current/ to find the help for the issue.

Links to klocwork.com cannot be opened in the Eclipse help browser

If you click a link in the Eclipse help documentation that references www.klocwork.com, a warning message will appear in the right pane of the Eclipse help browser indicating that this link cannot be opened within the current window. The user can then click the link in the message to spawn the topic in a separate window.

Uninstalling

Uninstalling Klocwork Insight

<yambe:breadcrumb>Installing_Klocwork_Insight|Installation</yambe:breadcrumb>

Before you uninstall

If you will be modifying or uninstalling a Server package or connected desktop installation, you must stop the Klocwork Servers first. See Stopping the Klocwork Servers.

If you are uninstalling the Server package, in addition to stopping the servers, you should also make a backup copy of your projects_root directory and any configuration files you modified, such as `kwfilter.conf`). For Unix and Windows, compiler configuration files are located in `<server_install>/config`; for Mac they are located at `/Library/Frameworks/KlocworkServer.framework/<version>/config`. For more information about backing up data, see Backing up Klocwork data.

While the Windows version of the Klocwork Server package won't uninstall the projects_root directory or configuration files, it's a good idea to make a backup of these directories to be on the safe side, particularly if you're uninstalling a version previous to 7.7. For Unix systems, there is no automated uninstall, so make sure you back up your projects_root and any other data files you want to keep and store them outside your Server installation directory. Then you can delete the Server installation directory.

See also Repairing a Windows installation of Klocwork Insight.

Viewing installed components or modifying your installation on Windows

Use the procedure below if you want to remove one or more Klocwork components, or if you need to check what components are currently installed. For example, if you need to uninstall Klocwork before installing a new version, you should check what components are currently installed before uninstalling, so that you can install the same components for the new version.

To view installed components or partially uninstall Klocwork:

1. In the Start menu, go to **Control Panel > Add or Remove Programs**.

    Windows 7: From the Control Panel window, under *Programs*, select **Uninstall a program**.
2. Scroll to and click the Server or desktop plug-in you want information on.
3. To find information about patches, make sure the *Show updates* checkbox is selected at the top of the Add or Remove Programs panel.

    Windows 7: Click **View installed updates** in the upper right.

    The installed patches will be displayed under the Klocwork installation package entry.
4. Click **Change**.

    Windows 7: Right-click the Klocwork installation package and select **Change**.

    The Welcome screen for the Modification wizard appears.
5. Click **Next**.

    The Program Maintenance panel appears.
6. Select *Modify* and click **Next**.
7. The Custom Setup screen appears. Click through it to see what components (features) are installed.

> **Note:** This symbol indicates a component that is installed: ▯

8. If you are simply viewing installed components:

9. Record which components are installed.

10. Click **Cancel**.

11. Click **Yes** when asked if you are sure.

12. Click **Finish**.

13. If you want to uninstall certain components, or install components you did not previously install:

14. For the components you want to uninstall, click *This feature will not be available*.

    For the components you want to install, click *This feature, and all subfeatures, will be installed on local hard drive*.

15. Click **Next**.

    The Ready to Modify the Program screen appears.

16. Click **Install**.

    The features you selected will be modified.

17. Click **Finish**.

Uninstalling Klocwork from a Windows machine

To remove a Klocwork software package:

1. From the **Start** menu, click **All Programs > Klocwork Insight 10.0**.

2. Select the uninstaller for the component that you want to uninstall.

Uninstalling in unattended mode on Windows

To run uninstallation in unattended mode from a Windows machine, enter the following command:

```
<installer.exe> /S /v"/qn REMOVE=ALL"
```

where <installer.exe> is the package you want to uninstall

An uninstallation log file will be saved to `%USERPROFILE%\Local Settings\Temp`. The log file is named `Klocwork<release-number>-<package>.log`. For example, the uninstallation log file for the Klocwork 10.0 Server package is named `Klocwork10.0-Server.log`.

Uninstalling on Unix

Viewing installed components on a Unix machine

If you are upgrading to a new version of Klocwork, check what components are currently installed before uninstalling, so that you can install the same components from the new version.

To list installed components (features), run the following command:

```
kwupdate [option ...] --list
```

See kwupdate for the full list of options.

To uninstall on Unix, simply delete the Server package and/or desktop plug-in package installation directory.

To uninstall, delete the following directories:

```
/Applications/Klocwork Server 10.0
```

```
/Applications/Klocwork User 10.0
```

```
/Library/Frameworks/Klocwork*.framework
```

```
/usr/local/kw
```

Uninstalling the plug-in from Eclipse and IntelliJ IDEA

Eclipse

To uninstall the Klocwork plug-in from Eclipse:

Eclipse 3.4	Eclipse 3.5 and 3.6
1. From the Help menu, choose **Help > Software Updates > Manage Configuration**. 2. The Product Configuration dialog appears. 3. Expand the items in the navigation pane until you see the Klocwork feature. 4. Right-click the Klocwork feature and choose **Uninstall**, and click **Yes** to confirm that you want to disable this feature.	1. From the Help menu, choose **Help > About Eclipse"** 2. Click **Installation Details**. 3. Select the Klocwork plug-in from the list and click **Uninstall**.

When you're prompted to restart Eclipse, click **Yes**.

Once Eclipse restarts, the Klocwork buttons and menu items are no longer present. If you haven't uninstalled the Klocwork desktop analysis plug-in for Eclipse, your Klocwork projects remain in their storage location.

IntelliJ IDEA

1. Go to **File > Settings**.
2. Under IDE Settings, click **Plugins**.
3. Right-click **Klocwork for Java in IntelliJ IDEA** and select **Uninstall**.
4. Close IntelliJ IDEA.
5. Restart IntelliJ IDEA to confirm the removal by ensuring that the Klocwork button has been removed.

Note: You must restart IntelliJ IDEA after uninstallation, before you install a new version of Insight.

Unable to start Klocwork Servers following Windows installation

<yambe:breadcrumb>Server and database administration|Server and database admin</yambe:breadcrumb> If you see one of the following messages after installing the Klocwork Server package on Windows:

• Error 1920. Service Klocwork 10.0 Server (Klocwork 10.0 Server) failed to start. Verify that you have sufficient privileges to start system services.

• Service Klocwork 10.0 License Server failed to start. See installation log for more details.

An earlier version of the Klocwork Server and/or Klocwork License Server may be running on the port that you specified during installation of Insight 10.0. It is not possible to run two versions of a server on the same port.

You need to set a different port number for the 10.0 Klocwork Server and/or 10.0 Klocwork License Server with kwservice set-service-property, and then start the servers.

See also

• Installing Klocwork Insight

Article Sources and Contributors

System requirements *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50403 *Contributors*: Aweekes, Azukich, Gfisher, Jdevette, Kwelsh, Mahmadi, Mtooke, Nzeltser, Pmurphy, Rsherk

Release Notes *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50318 *Contributors*: Arettie, Atrukhina, Aweekes, Azukich, Cberardu, Ctyson, Ecloninger, Gfisher, Jpatchell, Kwelsh, Mahmadi, Mtooke, Myurchenko, Pmurphy, Rsherk, TPenner

About the Klocwork packages and components *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49312 *Contributors*: Arettie, Aweekes, Kwelsh, Mtooke, Pmurphy, TPenner

Upgrading from a previous version *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49850 *Contributors*: Arettie, Aweekes, Jdevette, Kwelsh, Mtooke, Pmurphy, Rsherk

Import your existing projects into a new projects root *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50408 *Contributors*: Atrukhina, Jdevette, Kwelsh, Mtooke

Migrate your projects root directory *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50241 *Contributors*: Kwelsh, Mtooke

Installing the Klocwork Server package on Windows -- Upgrade only *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49819 *Contributors*: Kwelsh

Installing the Klocwork Server package on Unix -- Upgrade only *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49458 *Contributors*: Kwelsh

Installing the Klocwork Server package on Mac -- Upgrade only *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=44259 *Contributors*: Kwelsh

Getting a license *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49820 *Contributors*: Kwelsh, Rsherk

Installing Klocwork Insight *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49305 *Contributors*: Aweekes, Kwelsh, Mtooke, Pmurphy, TPenner

Installing the Klocwork Server package on Windows *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50290 *Contributors*: Arettie, Aweekes, Ekarpov, Kwelsh, Mtooke, Pmurphy, TPenner

Installing the Klocwork Server package on Unix *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49809 *Contributors*: Arettie, Aweekes, Kwelsh, Mtooke, Pmurphy, TPenner, 1 anonymous edits

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kwupdate *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=48990 *Contributors*: Dsidorov, Kwelsh, Mtooke, TPenner

Installing a desktop analysis plug-in *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49800 *Contributors*: Kwelsh, Mtooke

Installing the Klocwork plug-in from the Eclipse update site *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50012 *Contributors*: Aweekes, Jdevette, Kwelsh, Mtooke, Pmurphy

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Viewing and changing Klocwork server settings *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=36568 *Contributors*: Aweekes, Kwelsh, Pmurphy

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kwservice *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50021 *Contributors*: Aweekes, Kwelsh, TPenner

Unattended installation on Windows *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=49871 *Contributors*: Kwelsh, Mtooke

Testing your installation *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=50136 *Contributors*: Arettie, Kwelsh, TPenner

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Unable to start Klocwork Servers following Windows installation *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=39787 *Contributors*: -

Database connection error *Source*: http://www.klocwork.com/products/documentation/eliminator/index.php?oldid=46649 *Contributors*: Kwelsh, Pmurphy

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