



# What's New in the Build Forge System Version 7.0.2 iFix4

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# IBM Rational Build Forge What's New

This guide lists new features and known issues, including workarounds for the issues where possible.

Before using this information be sure to read the general information under [“Notices for IBM Rational Build Forge” on page 16](#)

First Edition December 2008

This edition applies to IBM<sup>®</sup> Rational<sup>®</sup> Build Forge<sup>®</sup> 7.0.2.

Document version and build: 7.0.2-004.0030.

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# About the Release

This document provides information about enhancements, resolved problems, and known issues in version 7.0.2 iFix3 of the Build Forge product.

## Installing this release

Before installing this release, obtain the latest version of the *IBM Rational Build Forge Installation Guide*.

Express Edition users can use the *IBM Rational Build Forge Express Installation Guide*.

The installation guide provides detailed instructions for installing the product and upgrading from previous versions.

Important updates include information related to national language support, prerequisite software, and supported platforms and databases. Review the information in the installation guide before starting an installation or upgrade.

## Getting the latest release notes

Important updates to this document may have been made since it was prepared for the product release. Download the updated edition from the IBM Publications Center, as follows:

1. Go to <http://www.ibm.com/shop/publications/order>.
2. Click **Search for Publications**.
3. In the Publications number field, enter the document number from the title page of this document.

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# New and Updated Features

No new or updated features are included in 7.0.2 iFix4.

# Fixed in This Version

This section lists problems that have been fixed in the current release. They are identified by their APAR defect tracking numbers.

The Description text is copied directly from the internal tracking database (RATLC) and may contain spelling or grammatical errors.

## Adaptors

APAR	Description	Internal RATLC
PK73235	Adaptor names with spaces fail to run on linux	RATLC01269693
PK73043	Altering environments from an inlined adaptor causes unreliable results/duplicate occurrences of the variable	RATLC01269305

## Agent

APAR	Description	Internal RATLC
PK74410	Adaptors cannot run if _MAXJOBS is set to 1 on the agent	RATLC01272147
PK72566	Mapping network drives does not work when using - \\server\share(username,password) 7.0.2+ agents	RATLC01268286
PK72462	The CPU_ARCH variable does not populate Xeon processor information correctly	RATLC01237764
PK71912	_LOG does not throw a warning or error when it fails to write output	RATLC01258751

## API

APAR	Description	Internal RATLC
PK73865	PERL API for DBO:User setPasswordExpires incorrect	RATLC01271041
PK72459	getPermissionList() API call does not return correct/full list of permissions	RATLC01237761
PK72151	API: Doesn't handle GDD.	RATLC01020506
PK71485	Deprecated Perl API is not included in distribution	RATLC01266104

## Documentation

APAR	Description	Internal RATLC
PK74895	.defect documentation in online help discusses adaptor links, which do not work for defect adaptors	RATLC01273260

APAR	Description	Internal RATLC
PK74497	BF: Silently fails when creating a tag variable that starts with "BF_"	RATLC01240219
PK73463	engine parses out \$ character from passwords in the _MAP variable	RATLC01270037
PK72764	RFE Mac agent should source logon profile out of the box for 10.5	RATLC01268701
PK72537	stdout is handled differently when running as an adaptor or as a regular step in BuildForge	RATLC01268183
PK68763	.put command is overwriting previous records without warning	RATLC01259111
PK56103	Importing a project into Build Forge which has notifications set for projects or steps causes unexpected behavior	RATLC01041590

### IDE Plug-ins.

## Management Console Engine

APAR	Description	Internal RATLC
PK74685	Inlined libraries no longer inherit step's environment	RATLC01272774
PK74616	Enabling Inherit Tag causes chained projects to hang	RATLC01272594
PK74409	Broadcast library step always run on first selection hit	RATLC01272143
PK74390	Incorrect usage of format strings in .date environment variables causes steps to fail	RATLC01271921
PK74320	After upgrading to 7.0.2 ifix 3, messages are populated in notifications and in the db.log regarding trashing	RATLC01271943
PK73872	tag variables incremented when must-change vars prevent build execution	RATLC01271058
PK73778	The ko_KR.ini file has an invalid sprintf entry for StepStartPart.	RATLC01270848
PK73672	step logs not visible after project restart with sync steps enabled	RATLC01270532
PK73297	The BF engine emits Use of uninitialized value in pattern match errors in the foreground capture	RATLC01269788
PK73089	Use of uninitialized value in X messages cause overpopulation of data in the db.log	RATLC01269387
PK72902	Project run from Start on purge are using calling projects selector	RATLC01269006
PK72646	The bfimport -r process replaces current LDAP users if there is a like local BF user in the export file	RATLC01268481
PK72600	Adapter parameters do not allow spaces in the parameter list	RATLC01268378



APAR	Description	Internal RATLC
PK71545	BF_RESERVE setting is not being honored.	RATLC01266224
PK71489	Environments are not being applied correctly on projects chained on Class promotion	RATLC01266110
PK71409	BF: Build Forge project did not stop on AgentReadError	RATLC01265872
PK71346	bfsched.pl has a memory leak, usage increases greatly	RATLC01236549
PK71140	fail chain not executed at project level for "Warning" builds	RATLC01265241
PK68572	Broadcast threaded step fails to complete if one of the steps which are threaded fails.	RATLC01258576
PK59070	threaded step with fail chain causes project to become unresponsive	RATLC01047513
PK58446	Build forge 7.0.2 does not store LDAP passwords in database with Store User Authentication Locally set to Yes	RATLC01045593

## Management Console User Interface

APAR	Description	Internal RATLC
PK75089	Insert step/Clone step button don't work	RATLC01273333
PK73729	project restart forgets variable overrides on sqlserver	RATLC01270778
PK72391	Some languages omit AM and PM in long and full date\time formats	RATLC01267784
PK72134	Scrollbar for the job filter drop-down menu	RATLC01266066
PK71972	LDAP users using upper case logins fail for Oracle backend DBs.	RATLC01267094
PK70381	Environment lists made up of variables making use of the new Expand Env Var option do not honor must change setting	RATLC01263499

## Quick Reports

APAR	Description	Internal RATLC
PK73655	quickReport> Query "to" dropdown nonfunctional	RATLC01270478

# Known Issues

This section describes issues that remain open in this release at production time.

## BF\_RESERVE not honored

BF\_RESERVE is not displaying its documented behavior. When used in a selector, it should create an exclusive relationship between a project and a server. which allows the project to run all steps without interruption.

*Workaround:*

1. Edit the project that you want to run exclusively on its server. Set the Sticky property to Sticky
2. Create a new selector (or copy a selector that uses the criteria needed).
  - a. Click **Add Selector Variable**
  - b. Set the Type property to Set Value, Variable to \_RESERVE, and Value to a non-numeric value, for example X.
  - c. Click **Save** .
3. Edit the project. In the Selector property, choose new selector you just created.
4. Add variable \_RESERVE to all other collectors. However, set value equal to numeric 0.

## BF\_TAG\_PHYS is not interpreted correctly in notifications

The BF\_TAG\_PHYS variable cannot be used in project-level notifications. It can be used in step-level notifications.

## MySQL: Quick Reports requires JDBC 5.0 driver for Apache Tomcat

Quick Reports does not work with the MySQL database if you have the default JDBC 5.1 driver installed for Apache Tomcat.

*Workaround:*

Download and install the JDBC 5.0 driver.

## Output from pvcs commands not captured by agent on AIX

A step containing a pvcs command may not capture all of the expected output if it is run by an agent on AIX.

*Workaround:*

Uncomment `disable_transcode` in `bfagent.conf` for the agent.

## DISK\_FREE not updated in Manifest tab for a server (Windows)

On Windows systems, the DISK\_FREE property is not updated in the Manifest tab after clicking **Test Connection** or clicking **Refresh** on the manifest tab. In the Management Console, click **Servers**, then click an individual server, then click the **Manifest** tab. The DISK\_FREE property appears in the properties displayed if it was defined for the server. If the free disk space on the server changes, then clicking **Test Connection** or **Refresh** should cause the value to be updated.

*Workaround:*

Click on a tab other than **Manifest** for the server, then click **Manifest** again.

## Files not copied when using Eclipse reflector

Issue: a selected file is not copied over.

*Workaround:*

When selecting files, select all directories from the root to the file location in addition to the file itself.

For example, if you want to reflect the file `APIException.pm` and it is located in the path `perl/BuildForge/Ex`, you must check all of these names in the file tree:

- perl
- BuildForge
- Ex
- APIException.pm

If you check `APIException.pm` but do not check its parent directories up to the root, then the file is not copied.

## Cannot connect to Microsoft SQL Server database if a case-sensitive collation is used

If a Build Forge database on Microsoft SQL Server is created using a case-sensitive collation, Build Forge fails during startup with the following error:

```
C:\Program Files\BuildForge>BuildForge -d
DBD::ODBC::st execute failed: [Microsoft][ODBC SQL Server Driver][SQL Server]Invalid object
  name 'information_schema.tables'. (SQL-42S02)
[Microsoft][ODBC SQL Server Driver][SQL Server]Statement(s) could not be prepared.
(SQL-42000)(DBD: st_execute/SQLExecute err=-1) at /PerlApp/BuildForge/DB/Handle.pm line
 211.
```

```
8808 /PerlApp/BuildForge/DB/sqlserver.pm(BuildForge::DB::sqlserver):42
```

```
8808 /PerlApp/BuildForge/DB/Handle.pm(BuildForge::DB::Handle):413
```

```
8808 /PerlApp/BuildForge/DB/ConnectionHandler.pm(BuildForge::DB::ConnectionHandler):34
```

Workaround: use a case-insensitive collation, such as the default: `SQL_Latin1_General_CP1_CI_AS`.

## Build Forge on Solaris hangs if file descriptor limit is set higher than 1023

Build Forge on Solaris can hang while trying to acquire a license due to a known issue in the Rational License Server.

To determine the file descriptor limit, use the following command:

```
ulimit -n
```

Workaround: set the file descriptor limit to 1023 or lower. If you do this while Build Forge is hanging, the license server corrects itself and Build Forge acquires a license immediately.

## Environments: using a backslash before ending quote in a variable assignment does not yield the expected result

In a variable assignment (`.bset env`) there are unexpected results if the last character before the ending quote is a backslash. This true even if parsing is turned off (`_NO_PREPARSE_COMMAND` is true). Example from step execution log:

```
195 01/28/08 03:45PM STEP .bset env "VAR07=C:\ "
196 01/28/08 03:46PM EXEC .bset env 'VAR07' = ''
```

Workaround: put a space before the ending quote. Example from step execution log:

```
187 01/28/08 03:45PM STEP .bset env "VAR032=C:\ "
188 01/28/08 03:45PM EXEC .bset env 'VAR032' = 'C:\ '
```

## URL for version 7.0 notification templates might not work in later versions

The notification template URL provides a link in the notification e-mail to the build report in Build Forge.

In version 7.0.1, the URL in the notification templates changed. Consequently, when you upgrade from 7.0 to any later version, the notification template URL links might not work.

If you experience a link error, make the following changes to the notification templates:

1. Select Project > Templates.
2. Click on the notification template to display its properties on the Details tab.
3. In the Body field, locate the URL for the template. The URL should be similar to the one in the following example:

```
http://${CONSOLEHOST}:${CONSOLEPORT}/fullcontrol/index.php?mod=projectruns&action=edit&bfid=${PID}&bfid=${BID}&bfid=${UID}
```

4. Replace the following 7.0 URL elements with the appropriate 7.0.1 (and later) URL elements:

7.0 URL elements	7.0.1 (and later) URL elements
projectruns	jobs
&amp;	&

## IE6 generates Visual C++ runtime error on save of data

Internet Explorer 6 users may see a Visual C++ runtime error if the Google toolbar is installed.

As a workaround, in IE go to Tools > Internet Options > Advanced and uncheck the "Enable third party browser extensions" option.

## Build Forge System i agents need to change standard agent port (5555)

The standard Build Forge agent port (5555) may be preassigned on a System i server. In this case, change the Build Forge agent port to an unassigned port before starting the agent. You can edit the BFAgent.conf file directly or use another method to change the port. For details, see the installation guide.

This problem will be fixed in a future release of the product.

## **Duplicate column values not displayed in Quick Report wizard-generated reports**

In wizard-generated reports, column values are not displayed if they duplicate or match the column value of the previous record. This display convention makes it look like report data is missing when it is not.

This problem is due to a limitation in the Eclipse reporting tool, BIRT. In a future product release, the ability to hide or display duplicate column data will be provided.

## **Some tool tip messages in system configuration settings are truncated**

This display problem is due to a limitation in Mozilla Firefox. Presently, there is no workaround. The problem will be addressed in a future product release.

## **Quick Report titles in performance report may be truncated**

Because of a dynamic chart sizing issue in the current version of the Eclipse reporting tool BIRT, performance report titles may be truncated. Presently, there is no workaround. The problem will be addressed in a future product release.

## **Quick Report titles cannot contain periods**

When you create a report, you must specify a title. If your report title contains a period, an error is generated and the report is not created.

Do not include periods in your report titles.

## **Not all installed components run if the Management Console is installed to NLV path**

Do not use national language characters in the installation directory path name that you specify for the Management Console. Problems with the installer prevent Build Forge from installing correctly. Use US-ASCII characters only for the installation directory path. This problem will be addressed in a future product release.

## Output for Build Forge agent install script (install.sh) is English-only

If you install the Build Forge agent on a host with an operating system language other than English, for example French on AIX, the output from the install script is in English. This issue will be addressed in a future product release.

## Install panels for MS Visual Studio .NET for Build Forge are English-only

The installation panels for installing and setting up MS Visual Studio .NET 2005 for Build Forge are not internationalized. The panel text is English only.

## DB2 error when upgrading from version 3.8 on MySQL to 7.0.2 on DB2 Express

If you migrate from version 3.8 with MySQL database to version 7.0.2 with DB2 Express, you run the bfdbmigrate script to migrate the database.

When you restart the Build Forge engine, the migrated database is started up. You might see a DB2 ALTER TABLE error.

Ignore the DB2 ALTER TABLE error; it is caused by an error in the Build Forge upgrade procedure. The upgrade procedure will be deprecated in a future release of the product.

Workaround: migrate to version 7.0 or 7.0.1, then migrate version 7.0.2.

## Oracle 9.x database fails with ORA-01400 error

The following error occurs only if the Management Console is using an Oracle 9.x database, the DBD::Oracle driver, and the ora\_ph\_type parameter is set to a value that strips trailing blanks.

```
DBD::Oracle::st execute failed: ORA-01400: cannot insert NULL  
into( "BLDFORGE"."BF_RESULT"."BF_ENV" )
```

To fix the error, do the following:

Set the ora\_ph\_type parameter. The value for ora\_ph\_type in *<bf-install>/db.ini* must be set to a value that does not cause the driver to strip trailing blanks. The setting ora\_ph\_type=96 is recommended. If set to a value that strips trailing blanks (for example, SQL\_VARCHAR), you will receive an error. The problem does not occur with Oracle 10.

## Quick Report fails to start (Microsoft SQL Server and Oracle databases)

Limitations in JDBC drivers cause the following requirements:

- Oracle: the database name and SID must use the same value (tnsnames.ora)
- Microsoft SQLServer: in an ODBC driver, the Database Name and Data Source Name must use the same value.

If these requirements are not met, the Quick Report reporting feature does not work. The requirements are documented in *Build Forge Installation Guide*.

## Management Console cannot connect to MySQL 5.0.41 database on console start (Windows only)

If Management Console fails to start and connect to the database, it might be caused by an error in the `libmysql.dll` file. To determine this, open the `php_error.log` file located in `C:\<BF_installationdir>\Apache\logs`. If the following error message is present, the error is in `libmysql.dll`.

```
PHP Warning: PHP Startup: Unable to load dynamic library 'C:\Program Files\BuildForge\Apache\php\ext\php_mysql.dll' - Invalid access to memory location.
```

To fix the problem in `libmysql.dll`, download and copy a new version, as follows:

1. Download `mysql-noinstall-5.0.41-win32.zip` from the MySQL Web site, for example:  
<http://www.mysql.org/get/Downloads/MySQL-5.0/mysql-noinstall-5.0.41-win32.zip> from <http://mirror.xl0.com/mirror/mysql/>
2. In the zip file, locate `\mysql-5.0.41-win32\lib\debug\libmysql.dll`.
3. Stop MySQL.
4. Copy `libmysql.dll` to the `<mysql_installdir>\bin` directory.
5. Start MySQL.
6. Restart the Management Console.

## New license server ignored on upgrade

If you enter a different host name for the license server on an upgrade install than you entered when the Management Console was first installed, the installation program ignores the new value.

*Workaround:*

Do not attempt to change the license server during upgrade. To change the license server once the system is installed or upgraded, follow the instructions in the Installation Guide: Installing the License Server > Changing the License Server to Use.

## Inconsistencies in BOM display for large BOMs

If the BOM for your project is large, you may notice that the category names for a section might not be displayed correctly.



## Assign hidden option not hiding variable value in logs

If you select the Assign Hidden property when you create a variable, the variable value is displayed in the step log instead of being masked with asterisk (\*) characters.

### Note

If you export a project, variables with the Assign Hidden property are shown in cleartext in the exported XML file.

This problem will be fixed in a future release of the product.

## Environment variable names that contain periods

If an environment variable name contains a period, attempts to reference that variable name in another variable fail. Shell-command parsing works differently on different platforms, which makes finding a uniform fix difficult.

*Workaround on Windows platforms only:*

1. Set an environment variable to the value of the variable name you want.

```
Name: tmp_var      Value: Version_1.1
```

2. Within a step, use the variable as the variable-name portion of an assignment.

```
set $tmp_var = 7
```

When the job runs, a variable `Version_1.1` is created with the value 7.

# Contacting IBM Customer Support for Rational Products

If you have questions about installing, using, or maintaining this product, contact IBM Customer Support as follows:

The IBM software support Internet site provides you with self-help resources and electronic problem submission. The IBM Software Support Home page for Rational products can be found at <http://www.ibm.com/software/rational/support/>.

Voice Support is available to all current contract holders by dialing a telephone number in your country (where available). For specific country phone numbers, go to <http://www.ibm.com/planetwide/>.

## Note

When you contact IBM Customer Support, please be prepared to supply the following information:

- Your name, company name, ICN number, telephone number, and e-mail address
- Your operating system, version number, and any service packs or patches you have applied
- Product name and release number
- Your PMR number (if you are following up on a previously reported problem)

## Downloading the IBM Support Assistant

The IBM Support Assistant (ISA) is a locally installed serviceability workbench that makes it both easier and simpler to resolve software product problems. ISA is a free, stand-alone application that you download from IBM and install on any number of machines. It runs on AIX, (RedHat Enterprise Linux<sup>®</sup> AS), HP-UX, Solaris, and Windows<sup>®</sup> platforms.

ISA includes these features:

- Federated search
- Data collection
- Problem submission
- Education roadmaps

For more information about ISA, including instructions for downloading and installing ISA and product plug-ins, go to the ISA Software Support page.

IBM Support Assistant: <http://www.ibm.com/software/support/isa/>.

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