

# Calcutta EAP (build 7601) Release Notes

## Features/Improvements

The most of the features in this build are brand new and we need your [feedback](#) on how do you find them, how they match your use cases and what improvements do you want in them.

## History Builds

From now on we have a little time-machine built into TeamCity. Just choose a change in the Custom Run dialog and TeamCity will trigger a build getting the sources corresponding to the change in the past.

The screenshot shows the 'Run Custom Build' dialog in TeamCity. It includes tabs for Log, Statistics, Compatible Agents (36), Pending Changes (0), and Settings. The dialog is set to use the 'fastest idle agent'. Under 'System properties', 'do.not.fork.javac' is set to 'true'. Under 'Environment variables', there is an 'Add new' button. The 'Include changes' section is set to 'All changes up to and including:' with a dropdown menu showing a list of changes. The most recent change is selected: '[01 Sep 17:58] labs\eugene.petrenko: Disable NetFx 3 components'. Below the dialog, a list of build statistics is visible, including 'Builds passed: 3994, ignored: 20'.

You can also locate a change in the build's changes and trigger a build from there.

The screenshot shows a build change entry in TeamCity. The entry is for build 201451, named 'kir', with 13 files. The comment is 'Start working on marking history builds', dated '04 Aug 08 15:49'. It shows '13 files (13 modified)'. A blue link 'Run build with this change...' is visible, with a mouse cursor pointing to it.

As with any time machine, there are some tricky issues:

- a greater build number does not mean more recent changes.

- the last build in the history may not depict the state of the latest sources.

Caution: the builds in the history are sorted by the start time, not changes.

For the history builds, you can see "History" instead of "Changes" and the build info is rendered using italic.

#1443	✓ Tests passed: 12 ▾	 View ▾	No changes	29 Aug 08 23:52	43s
#1442	✓ Tests passed: 12 ▾	 View ▾	<i>History ▾</i>	<i>28 Aug 08 21:13</i>	<i>29s</i>

Please note that the history build always uses the VCS roots and settings currently actual in the build configuration. Particularly, if you delete a VCS root from a build configuration you will lose ability to trigger history builds with changes of that root.

## Sequence of Builds: Same-sources Dependencies

Another major addition to TeamCity in this release is the new type of dependencies between the build configurations.

It allows you to ensure that a build will start only after the one it depends from is run and finished. Moreover, TeamCity ensures the builds use sources corresponding to the same moment.

Here is how it works:

- on triggering a build (either manual or by one of the triggers), the whole graph of builds linked with "sources dependencies" is retrieved, all the builds are put into the queue;
- when the first build within the graph is ready to start, all the VCS roots of builds in the graph are checked for changes, found VCS revisions are set to the builds;
- the builds are started. Each build can only start if all the builds it depends upon are finished.

This same-sources dependency is configured in the "Dependencies" section of the Build Configuration settings under "Dependencies by Sources".

Pending issues:

- display the depend-upon builds in the build results, in the build queue
- do not trigger a build when it has no pending changes (optionally)
- deal with failing depend-upon build (suggestions?)

## Improved Change Log

Calcutta > MasterBuild F

Overview History Change Log **Statistics** Compatible Agents (33) Pending Changes (2) Settings

Show changes from:  to:

Found **496** changes.  Show builds

#7588  Tests passed: 4156, ignored: 20 ▾		
#7587  Tests passed: 4156, ignored: 20 ▾		
31 Aug 08 18:50	<b>DataProcessor and importData service message</b>	leonid.shalupov
31 Aug 08 18:48	<b>removed isNullOrEmpty from StringUtil</b>	leonid.shalupov
31 Aug 08 18:47	<b>Moved waitForBuildFinished to AgentServerFunctionalTestCase</b>	leonid.shalupov
#7585  Tests passed: 4153, ignored: 20 ▾		
29 Aug 08 18:10	<b>Search query tuning, fix map</b>	alexey.gopachenko
29 Aug 08 17:59	<b>Search: better explanations!</b>	alexey.gopachenko

## Recently Failed Tests

Some time ago we started to gather recent tests failures statistics for the [Tests Reordering](#) feature. Now you can see this statistics in the web UI:

Overview History Change Log **Statistics** **Recently Failed Tests** Compatible Agents (2) Pending Changes

Tests failed at least once within last **120** hours.

Test
ShortStatisticsImplTest.tearDown (jetbrains.buildServer.serverSide.impl)
BuildAgent_MockRunnerTest.testRun_RunParametersFileExists (jetbrains.buildServer.agent.impl)
ProjectManagerImplTest.should_report_error_if_failed_to_load_project_settings (jetbrains.buildServer.serverSide.impl)
AntRunnerTest.testLog4J (jetbrains.slow.ant)
AntRunnerTest.testForkAntWithoutRuntime (jetbrains.slow.ant)
AntRunnerTest.testDebugParameter1 (jetbrains.slow.ant)
SimpleRunnerTest.split_quotes_test (jetbrains.slow)

## Improved Search

3.x release searched builds only by project, build configuration name, agent, tags and build numbers. Now builds also can be found by build status text, change committer and comment, VCS label, name of the triggerer. In addition you can use wildcards (?, \*) and [more](#). The search is powered by Lucene now.

## Other Improvements

- in the Run Custom Build dialog you can now add or redefine any build property. The modified properties will be shown on "Build Parameters" tab of the build results;
- on pinning/unpinning a build you can now leave a comment;
- plugin packaged under .BuildServer can not have agent part that will be automatically transferred to agents. [Packaging documentation](#);
- the requirement on synchronized clocks between TeamCity and Subversion servers has been lessened: now it only applies to the servers hosting externals-connected repositories.