



FREE eBook

LEARNING teamcity

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#teamcity

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About

You can share this PDF with anyone you feel could benefit from it, downloaded the latest version from: [teamcity](#)

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Chapter 1: Getting started with teamcity

Remarks

TeamCity is a continuous integration (CI) build system. Because it is developed by JetBrains, it integrates especially well with IntelliJ and other JetBrains IDEs.

Versions

Version	Release Date
5.0	2009-12-02
5.1	2010-04-21
6.0	2010-11-30
6.5	2011-05-24
6.5.1	2011-06-08
6.5.2	2011-07-07
6.5.3	2011-08-04
6.5.4	2011-09-20
6.5.5	2011-10-27
6.5.6	2011-12-09
7.0	2012-02-22
7.0.1	2012-03-20
7.0.2	2012-04-06
7.0.3	2012-05-15
7.0.4	2012-07-12
7.1	2012-08-07
7.1.1	2012-09-21
7.1.2	2012-11-12
7.1.3	2012-12-13

Version	Release Date
7.1.4	2013-02-07
7.1.5	2013-04-17
8.0	2013-06-20
8.0.1	2013-06-28
8.0.2	2013-07-23
8.0.3	2013-08-20
8.0.4	2013-09-27
8.0.5	2013-11-14
8.0.6	2014-01-21
8.1	2014-02-12
8.1.1	2014-03-06
8.1.2	2014-04-08
8.1.3	2014-06-05
8.1.4	2014-07-23
8.1.5	2014-09-26
9.0	2014-12-11
9.0.1	2014-12-30
9.0.2	2015-01-30
9.0.3	2015-03-13
9.0.4	2015-04-21
9.0.5	2015-06-26
9.1	2015-07-15
9.1.1	2015-08-04
9.1.2	2015-09-16
9.1.3	2015-09-18

Version	Release Date
9.1.4	2015-11-12
9.1.5	2015-12-21
9.1.6	2016-01-29
9.1.7	2016-05-04
10.0	2016-07-21
10.0.1	2016-08-09
10.0.2	2016-09-20
10.0.3	2016-11-10
10.0.4	2016-12-21

Examples

Installation or Setup

[Installing TeamCity server](#)

[Setting up and Running Additional Build Agents](#)

Read [Getting started with teamcity online](#): <https://riptutorial.com/teamcity/topic/5427/getting-started-with-teamcity>

Chapter 2: Backup TeamCity

Parameters

Parameter	Details
Backup File	The file name to use for backups.
Add Timestamp suffix	True or False, define if the file will have a timestamp at the end.
Backup scope	Define what you want to save
Basic	Saving the database, server Settings, additional data
All except build artifacts	Saving the database, server Settings, additional data, build logs, personal builds changes.
Custom	Define what you need to save.

Examples

How to backup

The backup menu is in the Administration Panel. And in the Left menu, inside the `Server Administration`, go on `Backup`.

TeamCity (as of v10) does not automatically backup, but you can get TeamCity to back itself up on a daily basis by scheduling a task to hit the REST api. Typically you would also need to schedule a second task (an hour? later) to copy the finished backup off the main TeamCity server and to a safer place.

(Note for security reasons it is better not to run an agent on the same machine as the TeamCity server)

Backing up using TeamCity API

First of all, Ensure that the user which will be running this call has the `Change backup settings` and `control backup process` privilege.

```
#
# TC Backup Launcher
# Script to launch a backup on the TeamCity Server
#
Param (
    [Parameter (Mandatory=$true)] [string] $username,
```

```

    [Parameter(Mandatory=$true)][string]$password
)
Begin
{
    $url =
"http://teamcity:8111/httpAuth/app/rest/server/backup?includeConfigs=true&includeDatabase=true&includeDef

    $username = <username>
    $password = <password>

# Function to realize a POST Operation
function Execute-HTTPPostCommand() {
    param(
        [string] $target = $null
    )
    $request = [System.Net.WebRequest]::Create($target)
    Write-Host "POST: " $request.RequestUri

    $request.PreAuthenticate = $true
    $request.Method = "POST"
    $request.ContentType = "application/xml"
    $request.Headers.Add("AUTHORIZATION", "Basic");
    $request.Accept = "*"
    $request.Credentials = New-Object System.Net.NetworkCredential($username, $password)

    $response = $request.GetResponse()
    $xmlout = ""

    if($response)
    {
        $sr = [Io.StreamReader]($response.GetResponseStream())
        $xmlout = $sr.ReadToEnd()
    }
    return $xmlout;
}

Write-Host "Creating a new Backup:"

Execute-HTTPPostCommand $url
}

```

The important part is the URL to call with method POST :

<http://teamcity:8111/httpAuth/app/rest/server/backup?includeConfigs=true&includeDatabase=true&includeDef>

You can specify the settings you want to backup as in the web interface.

Read Backup TeamCity online: <https://riptutorial.com/teamcity/topic/7269/backup-teamcity>

Chapter 3: Build configuration tutorial

Examples

Creating a Build Configuration Manually

Inside a Project configuration, you can `Create build configuration: Manually`

Provide a `Name` and a `Description`. The Build Configuration ID is generated from the `ProjectName`, and the Build Configuration Name's.

Administration > <Root project> > Sample > Create Build Configuration

Name: *	<input type="text" value="Hello World"/>
Build configuration ID: * [?]	<input type="text" value="Sample_HelloWorll"/> <small>This ID is used in URLs, REST API, HTTP requests to the server, and configuration</small>
Description:	<input type="text" value="Sample Hello World"/>
Based on template:	<input type="text" value="<Do not attach to a template>"/>

Once your configuraion is Saved, you can specify a Version Control Settings. This will point to your repository where TeamCity will find the sources of your application to build.

We will create a new Build Steps. The step will be a Command Line Step, which will Display "Hello World" inside the logs.

New Build Step

Runner type:

Command Line

Simple command execution

Step name:

Hello World

Optional, specify to distinguish this build step from other steps.

Run:

Custom script

Custom script: *

Enter build script content:

```
echo Hello World
```

A platform-specific script, which will be executed as a .cmd file on Windows

Once you have saved this step, you can run the Build configuration, and inside the `Build Log` tab, you will find something like this:

```
[00:00:00]Step 1/1: Hello World (Command Line)
[00:00:00][Step 1/1] Starting:
C:\TeamCity\buildAgent\temp\agentTmp\custom_script4323583874650153904.cmd
[00:00:00][Step 1/1] in directory: C:\TeamCity\buildAgent\work\362562ae9b31fb9a
[00:00:00][Step 1/1] Hello World
[00:00:00][Step 1/1] Process exited with code 0
```

The Step 1/1 Name is what you defined inside the box `Step Name`. This configuration will create a temporary script, here `custom_script4323583874650153904.cmd` with the following line of code :

```
echo Hello World
```

Read Build configuration tutorial online: <https://riptutorial.com/teamcity/topic/7266/build-configuration-tutorial>

Credits

S. No	Chapters	Contributors
1	Getting started with teamcity	Community , Didier Aupest , KIR , Willcodeforfun
2	Backup TeamCity	Didier Aupest , Squirrel , suren
3	Build configuration tutorial	Didier Aupest