

User manual, documentation

Application name:

*“Intelligent incremental backup system
for web servers”*

Filip Lukáč, Ivan Martynenko

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1. Application Run

- There are 2 possible ways of running the application:

1.1. CRON

Run .java file named Main.java (with auto method call from AppRun.class) to set the automatic backup for configured sites via (**NOTE: Replace the placeholder text in angle brackets with your specific values.**):

- Write a shell script that should contain the following lines:

```
#!/bin/bash
```

```
#set the classpath
```

```
CLASSPATH=<path to your java files>
```

```
#run the java program
```

```
java -cp $CLASSPATH <main class name>
```

- Make the shell script executable using the following command:
chmod +x <script name>.sh
- Open the crontab file using the following command: *crontab -e*
- Add the following line to the crontab file to run the shell script at a desired time: *<minute> <hour> <day of the month> <month> <day of the week> <path to script>*
- Save the crontab file and exit.
- Verify that the cron job is running correctly by checking the logs or using the following command: *crontab -l*

1.2. CLI

Run the app with IntelliJ with creating an AppRun instance via:

```
AppRun application = new AppRun();  
application.run();
```

By typing **wb**, **wb -h** or **wb --help**, the helper pops up:

```
Intelligent backup system for web servers

Usage:
  wb [commands]

Global app flags:
  -h, --help      Display help information about web-backups app

Commands:
  list-backups    Output a list of backups. In default, it'll list all backups from the local server. If the site name is set, only its backups will be listed.
  list-sites      Output the list of all configured sites of all local servers that share storage server with this local server.
  backup          Manually runs the backup of a specific site
  restore         Restores a specific site by writing its name and specifying the backup_id
  restore-files   Restores specific file(s) (if exists) from a .txt file
  enable          Enables site by adding or removing a link to the sites-enabled folder
  disable         Disables site by adding or removing a link to the sites-enabled folder
  set-period      Sets the backup period (days)
  set-switch      Whether to keep backups also on the local server. possible values 0/1 (bool)
  auto           Checks all configs of locally enabled sites and performs backups if needed automatically as requested in site config files
```

- For showing commands help line write **wb <command> -h** or **wb <command> --help**
Description then gets shown.

2. CLI Commands and functions overview:

2.1. `wb backup -flag`

```
Name:
  list-backups - Output a list of backups. In default, it'll list all backups from the local server. If the site name is set, only its backups will be listed.
Usage:
  list-backups [parameters...] [flags]
Flags:
  -f          represents a full backup
  -i          represents an incremental backup
  -b          lists the backups that are kept on the server
Parameters:
  (Optional) site_name
```

Runs the manual backup of the site specified in the config file.

Possible flags:

- `i` runs incremental backup
- `f` runs full backup

2.2. `wb restore backupId -flag`

```
Name:
  restore - Restores a specific site by writing its name and specifying the backup_id
Usage:
  restore [parameters...]
Parameters:
  site_name
  backup_id
```

Runs the manual restore for a specific site from the remote server by the `backup_id` if the `backup_id` for specific site exists.

- No flags possible

2.3. `wb restore-files`

```
Name:
  restore-files - Restores specific file(s) (if exists) from a .txt file
Usage:
  restore-files [parameters...]
Parameters:
  file.txt
  file_path
  file_path
```

Runs the manual restore for a specific site from the remote server by the `backup_id` if the `backup_id` for specific site exists. Files that are being restored are specified in a file which's path has to be written as a parameter.

- No flags possible

2.4. wb list-backups

```
Name:
  list-backups - Output a list of backups. In default, it'll list all backups from the local server. If the site name is set, only its backups will be listed.
Usage:
  list-backups [parameters...] [flags]
Flags:
  -f          represents a full backup
  -i          represents an incremental backup
  -b          lists the backups that are kept on the server
Parameters:
  (Optional) site_name
```

Lists backups that are locally stored on the machine.

Possible flags:

- f lists full backup folders for each site
- i lists incremental folders for each site
- b lists both

2.5. wb list-sites

```
Name:
  list-sites - Output the list of all configured sites of all local servers that share storage server with this local server.
Usage:
  list-sites [parameters...] [flags]
Flags:
  -e          lists only enabled sites
  -d          lists only disabled sites
```

Lists sites that are locally stored on the machine.

- e lists sites that are in the enabled list
- d lists sites that are **not** in the enabled list

2.6. wb enable

```
Name:
  enable - Enables site by adding or removing a link to the sites-enabled folder
Usage:
  enable [parameters...]
Parameters:
  site_name
```

Adds site to the enabled lists

- No flags possible

2.7. `wb disable`

```
Name:
  disable - Disables site by adding or removing a link to the sites-enabled folder
Usage:
  disable [parameters...]
Parameters:
  site_name
```

Removes the site from enabled list.

- No flags possible

2.8. `wb set-period`

```
Name:
  set-period - Sets the backup period (days)
Usage:
  set-period [parameters...]
Parameters:
  period
```

Sets the full backup period. Period should be one string without spaces consisting of numbers and coma as a separator. i.e. **2,5,15,20**