M-Turbo: Magento E-Commerce Accelerator Documentation

Michal Unzeitig

Jiří Chmiel



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Abstract

User documentation for ARTIO M-Turbo: Magento E-Commerce Accelerator module. Installation and usage instructions.

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Chapter 1. Introduction

1.1. What is M-Turbo

M-Turbo is a new unique acceleration module for Magento E-Commerce system, that aim to improve the Magento's biggest paid - speed. The concept behind is based on the fact, that most of the pages - product views, category lists or homepage does not change too often. Therefore, it is not needed to generate the page every time it is accessed from scratch and thus run the sophisticated but slow Magento Core every time. Most of these pages can be pre-cached - that is pregenerated - and then server to the site visitors as they were static HTML pages. This approach signitifantly descreases time needed to generate and download the pages and saves significant ammount of server resources for other actions, that cannot be cached.

M-Turbo offers Accelerated imaging of category list, detail of products and prospective homepage. This acceleration is working, if you are not using any query string in URLs link. The pages do not cache for logged-in users.

M-Turbo does cache:

- site frontpage
- category lists
- product details

The pages do cache for SEO URLs. They do not get cached for URLs including query string or for personalized pages for logged-in users. Anyway, as statistically most of the users browse your site unlogged, M-Turbo will bring a significant speed-up to your site.

1.2. M-Turbo Editions

M-Turbo Accelerator comes in two editions - free and paid. The free edition has some limitations, such as it does not speed-up product detail pages. Also, free edition generates a footer text with a component author back-reference.

Chapter 2. Installing M-Turbo

The installation consist of a several simple steps and can be done in a two different ways - using the PEAR repository used for Magento Extensions or by copying the M-Turbo module manually.

To install a paid edition, first follow steps to install the free one and afterwards follow steps to install paid.

2.1. Prerequisites

To continue following this instalation tutorial, first make sure that:

- you have a running and functional Magento site
- the file permissions are set correctly to be able to install add-ons

2.2. Installing M-Turbo Free Edition

You have two options how to start with installation of the free edition. You can make use of the Magento Extensions PEAR repository or do the installation manually.

2.2.1. PEAR-based Installation

To start installation, please visit TADY BUDE URL to get the extension key. In the section administration input to System/Magento Connect/Magento Connect Manager in Your Magento. Insert the extension key and push the button Install.

2.2.2. Manuall Installation

To install M-Turbo manually, unzip the distribution package locally or at the remote server. Then make sure to merge the app directory of your Magento site installation with the app directory in the M-Turbo distribution package.

When copying files to server, you need to make sure that you have the write permissions for the ${\tt app}$ folder.

2.3. Upgrading to Paid Edition of M-Turbo

The crucial condition for upgrading to paid version is the insertion of the valid licence key (also called Download ID). You will obtain the key based on purchasing the paid version license at http://www.artio.net/e-shop/magento-extensions/m-turbo-magen-to-accelerator. The license key is sent to you automatically by e-mail after your payment is confirmed. With instant types of payments the confirmation process takes seconds to a few minutes. With bank transfers, it may take even a few days.

After you receive the license key, please insert the key in the Magento administration as described at Section 3.3, "Registration Tab". If you insert key correctly, you will be able to push the Upgrade to full version situated in the upper left corner. This action will automatically download full version and install it on your file system. If you have standard Magento cache switched-off, you have to re-enable it. Upgrade has been completed successfully, when the button Upgrade to full version, together with the demo version note at left site of the screen disappears. You should also see new options at the ???.

In the case that upgrade was not successfull (in administration, the demo version note still appears or admin functionality is not workign correctly in any way) and you are sure to use valid license key, please check write permissions to folder app/code/local/Artio/MTurbo and files within. After checking and updating the permissions, simply press the button Upgrade to full version again. After the next installation run, the problems shall be fixed.

Chapter 3. Cache Usage and Managing

You can access M-Turbo administration by choosing System \rightarrow M-Turbo Management from the Magento backend menu.

There are 6 tabs available at the Control Panel. First one includes table of pages that are currently being cached. Second does include configuration options as well as controls for launching cache related actions. The other two tabs include trees where you can choose / limit categories and products included within, which you desire to cache. The 5th tab includes buttons with actions you can launch. The 6th then a form to insert your paid version license key.

3.1. Options Tab

This tab does include several options that control how the caching works as well as buttons to initiate cache-related actions. Any change should be saved by clicking the "Save Configuration" button located in the left-top corner of the page.

3.1.1. General Options

Path to cached pages	Using this option you can set a path to a directory, where cached pages will be stored. The path is relative to the Magento root path. In case of change, the directory will be renamed and all the cached pages will be moved, so the cache regeneration is not needed. It is important, that the path is accessible to the web server. Change of the path also requires update of the path in the .htaccess root file. The update of the path is made automatically, however the .htaccess file must be writeable.
Enable multistoreview	M-Turbo add-on also supports systems with more than one storeview active in case you have activated the storename into the URL. (This setting can be done in System \rightarrow Configuration \rightarrow Websites \rightarrow URL Options \rightarrow Add Store Code to URL). If this setting is already activated, you can activate this setting in M-Turbo. After enabling the setting, it is neccessary to delete and regenerate all cached pages.
Enable refresh after product or cat- egory save	Enables / disables automatic cache refresh on product or cat- egory modification. If the choice is selected, then after each saved change of the product a new version of cached page is stored for the product and related category. In case of category change, only the new category page cache will be created. In case when a product or category URL is affected by the change, the cache is not regenerated. In such case, a synchronization of cached pages with table of rewrites should be done - see TO- DO. Regenerating cache may take up to several seconds, there- fore in case of importing multiple products, it may be better to disable automatic cache generation temporarily, import all the products and afterwards initiate the newly imported products cache generation.

3.1.2. Homepage Options

Include homepage

If you select yes, the homepage will be also cached. In the list of the cached pages, the homepage is market with a backslash - "/".

3.1.3. Automatic Cache Management

Enable automatic cache generation	By selecting yes, you will allow automatic caching of all URLs listed, except the blocked ones. Automatic cache generation is runned daily at selected hour through a cron script. To be sure all runs as desired, you need to make sure wget program is installed at your system and your cron is configured properly.
Download time	Configures hour and minute when the cache autogeneration is started. Cache generation may take a significant ammount of time, so make sure to configure this for off-peak hours, ideally during night hours.
Last download	Information about the time when last automatic cache regener- ation was run.

3.1.4. Management Actions

Remove all cache pages	This action will remove all existing cached pages including di- rectories.
Synchronize with URL Rewrite Ta- ble	This action launches sycnronization with an actual list of URL redirect of Magento. The synchronization is done for products and categories marked to be cached. Only pages of active store- views are being cached. It is recommended to launch this action in case of more significant changes (product imports, storeview added, etc.) You can see list of the URLs at the first tab. Pages being cached are determined based on this list.
Generate list of rewrite URLs to file	Launching this will generate a list of cached URLs into a file. The file will be saved in a directory configured under Path to cached pages and its name is urllist.txt. This file is used also for cache autogeneration. It is therefore runned automati- cally before each cache autogeneration run.
Download all pages	Interactive generated of all pages listed in the cache pages list (except the blocked ones). The progress of caching can be mon- itored in a separate window (do not close this window). Please note that the generation of all cache pages may take consider- able ammount of time, depending on overall number of pages.

3.2. URLs Tab

This tab contains a list of pages to be cached. All automatic caching is done based on this list. The list is prepared based on the URL rewrite list of the Magento core. In case the list is not complete (e.f. after new products has been added) you can update the list by doing the synchronization action.

Any page in this list can be blocked and thus prevented from being cached. If the page is blocked, it is prevented from being cached and will be ignored during the caching process. If you block an already cached page, it will be automatically erased from the cache.

Table 3.1. List of table columns

ID	Internal identifier
Store	Store where the page belongs
Request Path	Page URL relative to Magento store root

Cached	Shows if page is cached (cache file is present on the disc)
Last Refresh	Timestamp of the last page cache refresh
State	Displays if page caching is blocked or not

At the head of the table, you can find Cache Selected Pages button, that will initate cache generation for the pages selected in the list.

3.3. Registration Tab

This tab contains a field where the product license key (Download ID) can be intered. To be able to upgrade from free to paid version, the key (Download ID) needs to be filled in correctly. The most recommended procedure is to use copy + paste function from the e-mail where the key was sent to you. Please, insert the key into the provided field and confirm the action by clicking the Save configuration button in the upper left corder. If the correct key was inserted, you should see your order data linked to the key (Name, Company, Date) and the text: Status: OK. In case of failure, you will see a message describing the problem (key not recognized, domain not matching, etc.)

3.4. Page Selection Tabs

The last two tabs are used to define what categories and products should be cached.

At the tab named Categories, you choose categories for which the list pages should be generated.

At the tab nabmed Products, you choose categories, where the product detail pages will be cached.

After making the desired choice, press the Save Configuration button and then synchronize the list using the Synchronize with URL Rewrite Table at the Configuration tab.

Chapter 4. FAQs and Troubleshooting

4.1. Q: The page appears to be cached, but when attepting to access it, the browser reports "Access forbidden" error

A: Most likely, the .htaccess file is missing the the directory with the cached files. This problem can be fixed by creating an .htaccess file in the directory containing the cached files (default in var/turbocache) with a following content:

Order deny, allow

Allow from all

4.2. Q: The daily night cache building does not work

A: There can be multiple source of this problem. First of all, make sure to check that setting "Enable automatic cache refresh" in module settings is enabled. If the settings is enabled, but the cache refreshing does not work anyway, make sure that the Magento cron jobs are runned regularly and that the its parameters are set correctly - see System \rightarrow Configuration \rightarrow Advanced \rightarrow System \rightarrow Cron. More instructions about cron setting in Magento is available at http://www.magentocommerce.com/wiki/how_to/how_to_setup_a_cron_job.

4.3. Q: How can I identify if the page is cached and when was it recached last time?

A: You can find this easily by checking the source code of the given page in your browser. If you see a special tag at the end of the source code, then the page is cached and the tag includes a timestamp information about when the page was cached last time. If you do not see any such marker there, the page is not being generated from M-Turbo cache.

4.4. Q: The time of last caching does not match the real time

A: The reason for this might be either incorrectly set time on the server or different timezone settings at server and in your Magento configuration.