



# MSF-ME Website Management

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Project Manager - Website



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# Website Architecture

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## 1. General Website Information

MSF-ME.ORG is hosted at SiteGround in Amsterdam, the Netherlands, on a dedicated server with 8 CPUs and 16 GB RAM. Note that SiteGround has two other hosting locations, in Singapore and in Chicago, USA.

The main software installed on the server is:

- a. CentOS 7.x Linux-based operating system.
- b. Apache 2.4+ with http2
- c. PHP 7.x with opcache and PHP-FPM (Fast Page Mode) for Apache
- d. Memcached service (latest version)

Note that any PHP version above 8.0 will break at least one component/module of the website.

**Please jump to the next section if you are not interested in knowing the website's performance.**

To find how efficient it is to access your website, use the link below to trace its route, showing how many hops it takes to get to it:

<https://www.ultratools.com/tools/traceRoute>.

You may also use the Windows command line (found under Accessories or PowerShell on Windows 10), ping, and tracert. For example:

➤ **ping www.msf-me.org**

Pinging msf-me.org [107.6.170.140] with 32 bytes of data:

Reply from 107.6.170.140: bytes=32 time=180ms TTL=54

Reply from 107.6.170.140: bytes=32 time=189ms TTL=54

Reply from 107.6.170.140: bytes=32 time=200ms TTL=54

Reply from 107.6.170.140: bytes=32 time=217ms TTL=54

This means it takes approximately 0.2 seconds for my home connection to reach the server. It would be better if pinged from the MSF UAE office.

It is best to use a Content Delivery Network (CDN), such as Cloudflare or Amazon CloudFront. A CDN service has servers worldwide. What it basically does is to store a website's static content and cache it in different locations. So, no matter where your website is accessed from, the response to users from their respective locations is the same.

You may also use the following command to show the route it takes from your connection to the server:

➤ **tracert www.msf-me.org**

## 2. Web Hosting Services

SiteGround provides the following services, shown in the image below. The setup and configuration of our website is managed via Control Panel (cPanel) and Web Hosting Management (WHM) interfaces.



cPanel is used to access the database and the website file structure. The home directory is physically located on the server at `/home/msfuae`. Once logged to cPanel, clicking on Server Information in the right pane gives the following details:

Item	Detail
Hosting Package	default
Server Name	esm1125
cPanel Version	66.0 (build 35)
Apache Version	2.4.33
PHP Version	7.4.33



Item	Detail
MySQL Version	5.6.40-84.0
Architecture	x86_64
Operating System	linux
Dedicated IP Address	107.6.170.140
Path to Sendmail	/usr/sbin/sendmail
Path to Perl	/usr/bin/perl
Perl Version	5.10.1
Kernel Version	2.6.32-696.30.1.el6.x86_64

The commonly used functions in **cPanel** are:

1. File Manager to access website folders and files found under public\_html
2. phpMyAdmin to manage databases. Website database is msfuae\_website
3. MySQL Database Wizard to create new databases and users
4. Subdomains to add a new subdomain
5. Errors to view the error log
6. SSL/TLS to install the Norton Symantec security certificate when it expires. Here are the instructions: <https://knowledge.digicert.com/solution/SO8053.html>

Note that msf-me.org emails are handled from Gmail, and “Optimize Website” must be set to Compress All Content. Also, site statistics should be accessed from Google Analytics rather than cPanel.

**Warning: Never use the Site Publisher; it will overwrite your website contents.**

The commonly used functions in **WHM** are:

1. View server configuration



2. Manage root's SSH key for remote access to the operating system
3. Backup to view for which days backup is available and modify the backup schedule
4. System update to run at least once a week
5. System reboot in case the kernel was updated from the previous step. Reboot must be done when website traffic is low.
6. Restart services such as PHP-FPM and Apache after the system update is complete

Some functions are only used at setup in case the server is rebuilt. These are:

1. Basic Webhost Manager Setup to add/modify contact email address
2. Edit MX Entry under DNS functions to make the email point to Gmail

TTL	Priority	MX Destination	Actions
14400	10	aspmx.l.google.com	<input type="button" value="Delete"/> <input type="button" value="Delete (new)"/>
14400	20	aspmx.l.google.com	<input type="button" value="Delete"/> <input type="button" value="Delete (new)"/>

For both \*.msf-me.org and msf-me.org, there should be a priority 10 MX record configured as follows:

aspmx.l.google.com

3. Apache configuration – Include Editor to add Apache Solr configuration

Once in the Include Editor, select All versions under Pre Main include, and you will see the following setup:

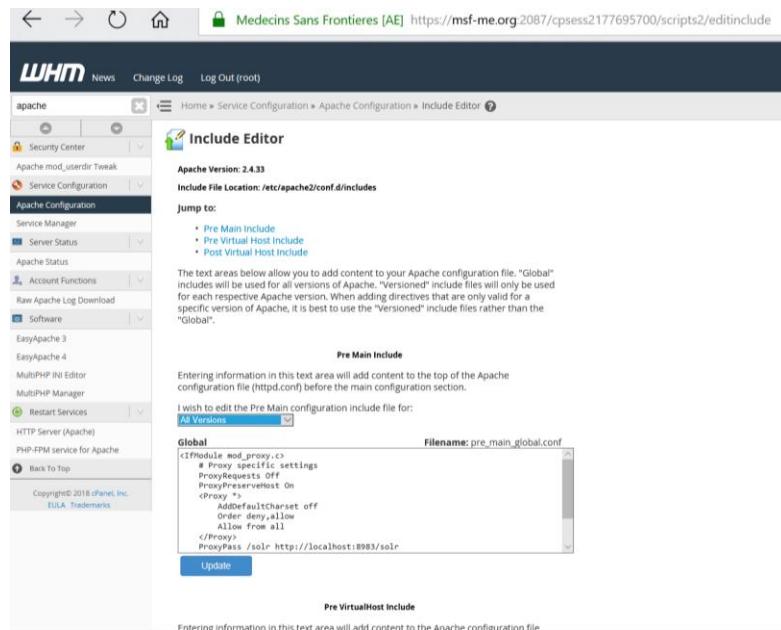
```

<IfModule mod_proxy.c>
# Proxy specific settings
ProxyRequests Off
ProxyPreserveHost On
<Proxy *>
  AddDefaultCharset off
  Order deny,allow

```



```
Allow from all
</Proxy>
ProxyPass /solr http://localhost:8983/solr
ProxyPassReverse /solr http://localhost:8983/solr
</IfModule>
```



```
Allow from all
</Proxy>
ProxyPass /solr http://localhost:8983/solr
ProxyPassReverse /solr http://localhost:8983/solr
</IfModule>
```

The above must be added if a server was rebuilt; otherwise, the website's search will not work. Apache Solr software must be installed on the operating system for the above setup to work. A technical support person will need to perform this installation. The following link provides guidelines for installing Apache Solr.

<https://www.drupal.org/node/2502203>

### Note to check Solr version compatibility with your Drupal version.

From the operating system or WHM Include Editor, add the code below to the following file:  
**/etc/apache2/conf.d/includes/post\_virtualhost\_global.conf**

**DO NOT MODIFY** httpd.conf, it will be overwritten every time Apache is restarted.

```
<IfModule mod_proxy.c>
  # Proxy specific settings
  ProxyRequests Off
  ProxyPreserveHost On
  <Proxy *>
    AddDefaultCharset off
    Order deny,allow
    Allow from all
```



```
</Proxy>
ProxyPass /solr http://localhost:8983/solr
ProxyPassReverse /solr http://localhost:8983/solr
</IfModule>
```

Once Solr is installed and the above setup is saved under Include Editor, you will need to restart the Apache Service for it to take effect. Then you may view the Solr Apache admin by typing in your browser:

<http://msf-me.org/solr>

#### 4. Solr Search Admin

The Solr administrator web page will display the following:

msf-me.org/solr/#/~cores/collection1

Apache Solr

collection1

Core Admin

Index

Core

Index

Documentation Issue Tracker IRC Channel Community forum Solr Query Syntax

Core	Index
start time: 3 days ago	last modified: about an hour ago
instance dir: /opt/solr/example/solr/collection1/	version: 41733
data dir: /opt/solr/example/solr/collection1/data/	num docs: 2286
	max doc: 2287
	deleted docs: 1
	optimized: <span style="color: red;">✖</span>
	current: <span style="color: green;">✓</span>
	directory: org.apache.lucene.store.MMapDirectory:MMapDirectory@/opt/solr/example/solr/collection1/data/index lock factory=org.apache.lucene.store.SingleInstanceLockFactory@26434c25

The only functions available are to click “Core Admin” in the right panel, then click the Optimize button, then the Reload button. Note that these steps are optional; the batch (Cron) job does them automatically.

Accessing the Solr admin is mostly used to check if Apache Solr is up and running. This may also be checked from the Drupal admin under Configuration – Apache Solr.

#### 5. Increase Website Speed

Here are some solutions to increase website speed:

- a. Upgrade hardware. For example, we may increase the CPUs from 8 to 16 and memory from 16 to 24 or 32 GB on our dedicated server, but this means that we have to pay more for monthly web hosting services. SiteGround offers 16 GB of memory for an additional \$80/month.
- b. Upgrade operating system to the latest CentOS 7.x. This requires rebuilding the server from scratch, which takes a few days. This means significant website downtime, but this is a must-do sooner or later because the 6.x operating system will no longer be supported.



- c. Install recommended Booster from Siteground for an additional \$50/month. However, we will no longer have root access, meaning no direct access to the operating system. We will only have access to cPanel. This is a setback; we will require SiteGround support if we need anything done. However, not a major setback. This is what SiteGround offers: <https://www.siteground.com/speed>
- d. Install a CDN service for about \$20/month in case we don't wish to install SiteGround booster, which already comes with CloudFlare CDN. We currently have a free Cloudflare subscription, which blocks the upload of our Symantec SSL certificate. It was tested for a few days and showed significant speed. The daily speed was showing an average of less than 5 seconds in Google Analytics.
- e. Always optimize images by scaling them when necessary and reducing their size to less than 35kb for full images, and less than 7kb for scaled images (314x210).

In summary, if memory is upgraded to 16GB and the SiteGround booster is added to the web hosting services (options “a” & “c” above), then we will pay an additional \$130/month on top of the current \$329/month.

The second alternative is option “a” and “d” for an additional \$100/month.

The third alternative is option “c” alone for an additional \$50/month. Highly recommended, even though we lose self-management of the server. A technical person will have to contact SiteGround for any software updates or operating system-related issues.

The last alternative is option “d” with an additional \$20/month.

Upgrading the operating system will cost an initial setup fee, and there will be a one-time \$50 setup fee for upgrading the server's memory.



## 6. Optimizing images

Images should be downloaded and reduced to a small size, usually less than 35 Kbytes for an approximate resolution of 1000 x 600 pixels. To avoid distorting the image, keep a proportional width and height. For example, if you set the width to 1000 pixels, then either calculate the proportional height manually or use a graphics tool.

The image should be optimized without changing its final size (1000x600) unless it is a scaled image, such as the ones on the front page below the main image or the related articles at the bottom of each article. These are scaled to 314 x 210 pixels and 314 x 209 for the latter.

Whenever a new article is added, its image and link appear on the front page. The system does not automatically change the image size; it scales it from its original size to the scaled size, which requires additional processing time.

To view which images require optimization, we need to run [GTMetrix](#) on the specific page we are optimizing, and always the home page. We will also need to use Google Analytics by running Speed Suggestions under BEHAVIOR in the left-hand panel. These tools will tell us which images to optimize or to resize.

When creating an article in Drupal, you will need to select an image from MSF's media database to set it as the main image. However, the images from the media database are not compressed.

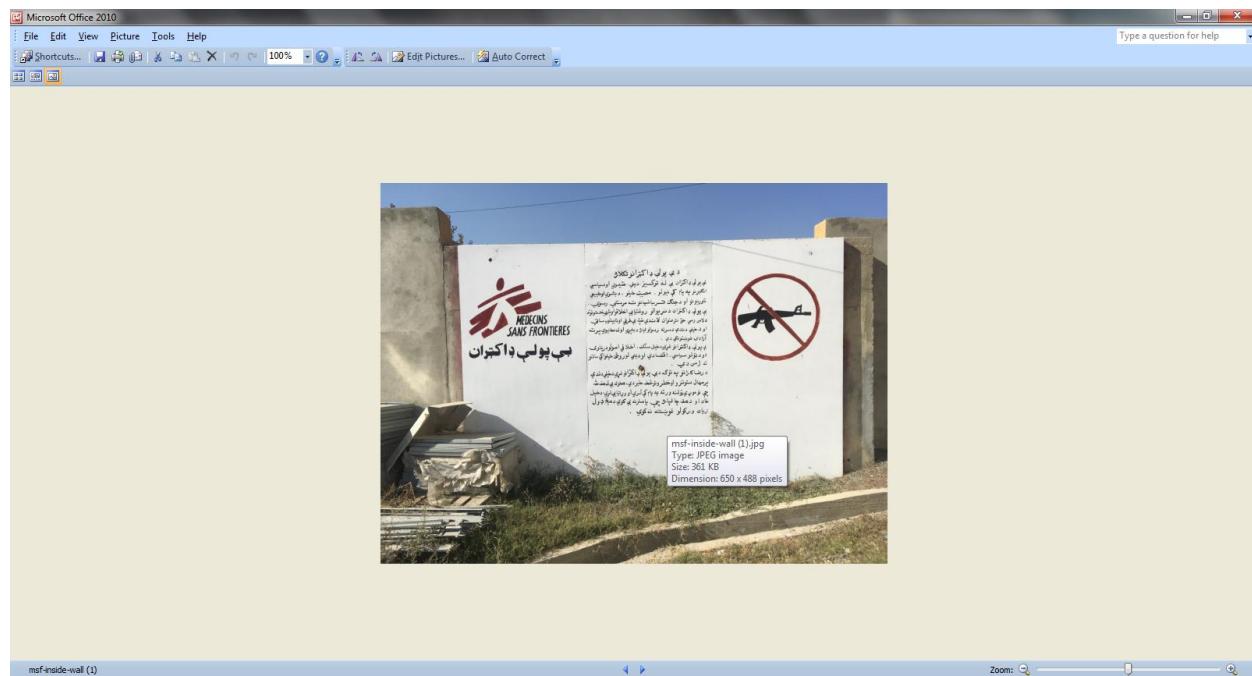
Leaving it uncompressed will slow page loading. For example, if it takes 20 seconds to load on a fast connection, it might take 3-5 times longer to load on a slow connection. **Therefore, compressing images is extremely important and shouldn't be taken lightly.**

Using Windows tools such as Microsoft Image Manager cannot compress an image to less than 35 KB without significantly reducing its resolution. However, it is a good tool to reduce the highest resolution image from the media database to usually less than 200kb and automatically make its width about 1000 pixels. It automatically also gives the image the proper proportional height.

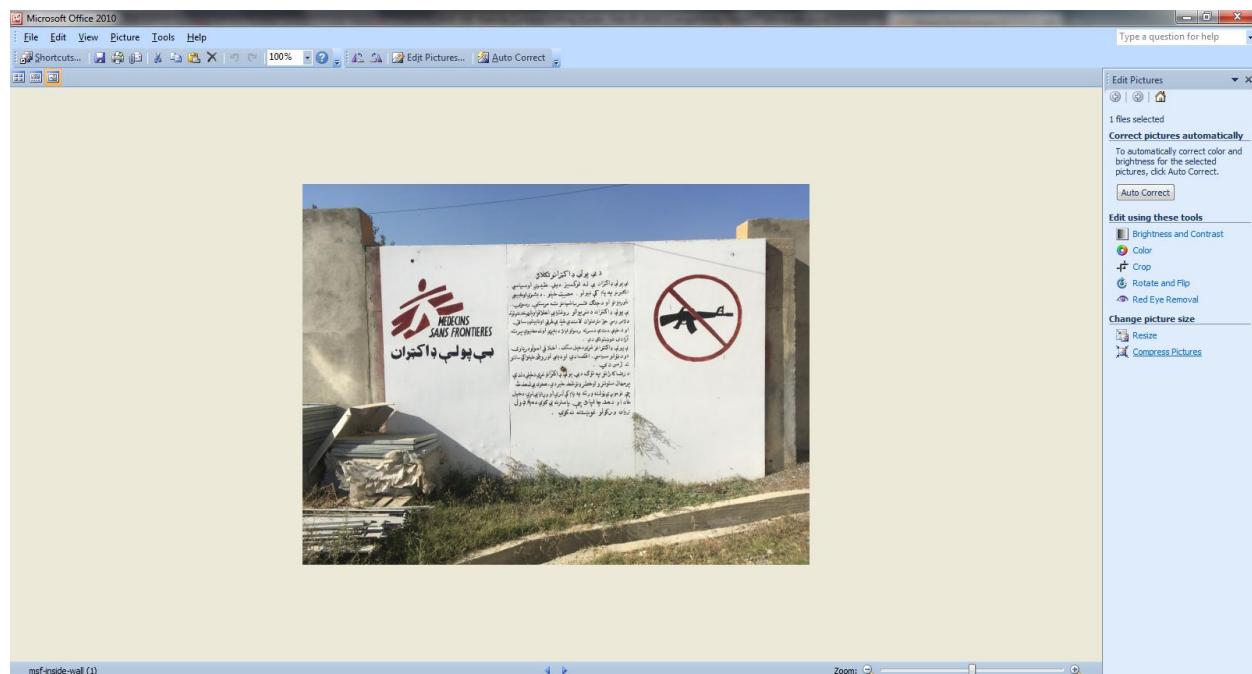
In case of a scaled image, the Microsoft Image Manager allows us to resize the image to the desired size (314 x 210 px), such as scaled images on the front page, but cannot compress it any further.

Now let's compress images using Microsoft Image Manager.

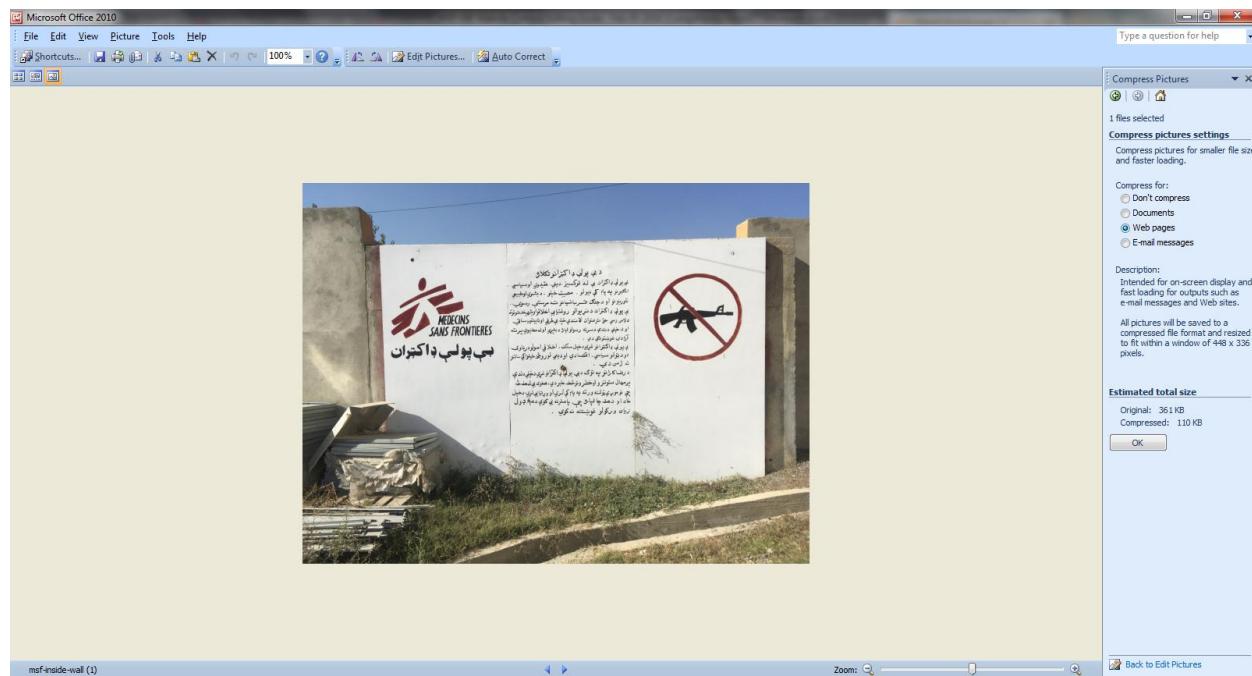
Open the folder and right-click on the desired image, choose "Open with", and from the submenu, select "Microsoft Office 2010", which is Microsoft Image Manager. The image will be displayed as such:



Click on “Edit Pictures...” button at top, you will get a side menu:



Select “Compress Pictures”, which is the last option on the side menu. When the menu changes, click on the “Document” radio button. You may alternatively click on “Web pages” if the image is not the main image in the article but needs to be in the article body. Press the “OK” button and save the image.



The image size should be significantly reduced.

Note for Microsoft Image Manager to work, the image resolution needs to be larger than 1024x640.

The next step is to optimize the image further using the following online tool:  
<http://compressimage.toolur.com/>

Note that each time you load a new image from the above website, **refresh the page** to avoid recompressing previously loaded images. If open for a long time, it might time out and stop working properly without leaving any error message. Therefore, always use the browser refresh to reload the page.

After uploading the image, you may use all defaults except for image quality. For a large image, this may be reduced to 30%. A scaled image is reduced by about 50%. Now, click on the "Compress Images" button to compress the image. Before downloading the compressed image, click "View" to ensure that its quality is still reasonable.



The screenshot shows a web browser window with the URL [compressimage.toolur.com](http://compressimage.toolur.com). The page is titled 'Compress and Resize JPG'. On the left, there is a sidebar with a list of 'Featured tools' including: Web Proxy, MP3 Cutter, Alarm Clock, Photo Resizer, Password Generator, GIF Maker, Images to GIF, Photo Compressor, Base64 Decode, Convert Case, Word Counter, ICO Convert, EXIF Viewer, PDF to JPG, and MP3 Converter. The main content area has a heading 'This online image compressor allows to compress and resize your JPG or PNG images to save your disk space.' Below this, it says 'You can specify the image compression rate and the image dimensions to reduce the file size significantly.' and 'Select multiple images in JPEG, PNG or BMP format( it will convert PNG to JPG format ):'. There is a 'Upload Images' button. Below it, a message says '1 images uploaded successfully'. The next section is titled 'You can compress and resize your images now' and contains configuration options: 'Compression method<sup>(1)</sup>' with radio buttons for A, B, C, D, E, F (lossless), and G (lossless), where C is selected; 'Image quality' with a slider set to 30%; 'Compression type' with radio buttons for Normal (selected) and Progressive; and 'Resize to( optional )<sup>(2)</sup>' with input fields for width (0) and height (0) in pixels, and a checkbox 'Do not enlarge images' which is checked. Below these are four buttons: 'Compress Images', 'Resize Image', 'PDF to JPG', and 'Web Proxy'. At the bottom, a message says 'Successfully compressed from 403.4 KB to 33.3 KB( C, 30%, Normal, Auto x Auto )' with 'View' and 'Download' links, and a note 'You may need to change the image quality to a smaller value to get better compression rate'.

The image that I compressed in the example above was about 400 Kbytes and was reduced to 33 Kbytes after compression.

If you are not using Windows, you can use the above tool to resize and compress images. However, you will need to calculate the proportional height given a width of 1000 px to avoid distorting the image. "Microsoft Office 2010" does it automatically for you.

One may also use the Linux tools to compress images in batch and reduce their quality, but that requires access to the operating system, and we may not get the same compression results. The above online tool works really well.

## 7. Working on Staging Site

To test the website on a hosting configured in the same way as production, without affecting production, you will need to access the staging by using the `msf4me.org` domain. This domain is rerouted to `msf-me.org`. To test, you can temporarily disable the rerouting from the control panel. It is set not to propagate, so make sure this option is still enabled.

Replace all references to `msf-me.org` with `msf4me.org` by dumping the database file after clearing the cache and opening it in a powerful text editor such as Notepad++. When the file opens, replace all references to `msf-me.org` with `msf4me.org`. Save the file and upload it to `msf4me.org` by using phpMyAdmin from the control panel:

<https://msf4me.org/cpanel> (username: `msfuae`, password: `m_s_f_01`) or through the operating system, which is much faster to upload by issuing the command: `mysql msfuae_website < msfuae_website.sql`



**msfuae\_website.sql** is the file modified using the text editor. This will overwrite the staging database with the production data.

To access the operating system, you will need to use SSH by using **Pageant** and **PuTTY**. Pageant reads the SSH key (**password**: @Paris.MSF.Org) defined in the system through WHM, while PuTTY will allow access to the operating system by entering the production/staging server IP address and port in PuTTY's interface.

**Production:** 107.6.170.138 18765

**Staging:** 50.31.134.14 2222

Note that Pageant is not available for MAC, but there might be an alternative software. A Google search will help in finding a proper alternative.

Finally, issue the following command after changing directory to the root of the website, which is /home/msfuae/public\_html:

```
tar -cf - * | ssh 50.31.134.14 -p 2222 'tar -xvf - -C /home/msfuae/public_html'
```

This will overwrite the entire staging with production. This might take a couple of hours due to the website's size.

## 8. Creating a Local Staging Site

In order to duplicate the website on your local machine, you will need first to install WAMP for Windows or MAMP for Mac. Google those terms and download the development platform that suits your environment. This will allow you to play and experiment with the current code.

You will also need to install Apache Solr 4.x for Windows or Mac in order for the search features to work.

The second step is to download the entire website into your WAMP/MAMP www (root) directory. To do that, you may zip the website but it has to be done in small pieces. The "sites" subfolder has too many files so it should be zipped in different zip files.

A better alternative is to use rsync for Windows by installing Cygwin. After open the Cygwin shell, issue the following command:

```
rsync -av --update --recursive -e "ssh -p 18765 -i rsa"  
"root@107.6.170.138:/home/msfuae/public_html/"
```

The first two folders in the root of the website are specific to the Siteground hosting environment so you may start zipping files starting from the "adm" subfolder and zip "40years" as well since it is large. However, it is not really needed since we are not using it currently and if it is used, it is only used on the history page and there is no code to change in it.



You will also need to back up and download the database, then restore it on your local machine. You have to be careful that everything in that file points to msf-me.org, so you must open the SQL dump in a local text editor and replace all references of msf-me.org to point to your local server, then restore it in your local database.

Also, modify the database connection in sites/default folder/settings.php.

It is normal to run into issues initially because your machine is not set up in the same manner as the web server. Most of the issues could be related to Apache or PHP setup, mostly PHP. You might have to increase the PHP memory. You may do so in the php.ini file in the website root directory.

Note that the msf-me.org website is fairly complex and there might be components that will not work on your local environment so these might be disabled. To know what does not work check the Drupal status report (explained in next section) on your local machine. Some modules might not be necessary in your local environment.

## 9. Useful Linux Commands

```
#Apache benchmarking
```

```
ab -n 10 -c 5 https://www.msf-me.org/
```

```
#Find file by name starting from the root
```

```
find / -name filename
```

```
#Search for text inside files. This takes lots of resources so it is best not to do it during peak hours
```

```
grep -rnw '/home/msfuae/public_html/' -e 'text-to-search'
```

```
#Change directory and its subdirectories permissions to full access
```

```
sudo chmod -R ugo+rwx directory_to_change
```

```
#Other commands
```

```
mkdir directory
```

```
rmdir directory
```

```
rm -rf directory #removes directory and its subdirectories
```



To get help, type the command followed by –help or -help.

Most commands are readily available online by using Google. You may add CentOS 7 to your search. If you wish to install modules, your search should include cPanel to receive installation instructions. Apache and PHP are managed through cPanel/WHM.

Knowing Linux commands is key since we have a **self-management server**.

## 10. Backup and Restore

Backup and restore are accessed from the Web Hosting Manager (WHM).

The backup is done automatically, and it is done for the operating system files, the website files, and the website database. The backup schedule is weekly, and there is a monthly backup. This means that we may access backups for an entire week from today's date. The monthly backup is done on the 15<sup>th</sup> of every month and will stay until the 15<sup>th</sup> of the following month.

Restore could be done through the user interface but it restores everything. You may select to restore the operating system files, the website files and database separately but you cannot restore individual files or tables from the database. This may be done from the operating system by unzipping the files in question and locating the desired file. For the database, you need to be familiar with the MySQL command from Linux to restore individual tables.



# Drupal Management

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Learning the details of Drupal and how things are linked and programmed to interact with each other, including how to build your own module and modify the theme, requires that you access a good online training site, such as: <https://drupalize.me/>

To keep the Drupal site up to date and working properly, one should monitor the status report and error log daily.

## 1. Status Report

The status report, accessed from the Reports menu at the top, provides an overview of your Drupal site's general health. Any misconfiguration or conflict will appear in this report. The report will also inform of any module or core update.

If the report shows entries in green or blue that means all is OK, otherwise there is a problem that needs to be resolved as quickly as possible. **Make sure to check this report on daily basis.**

For module updates, just follow the instructions given in the available updates screen. For core update, it is required that you download the latest version and unzip it in a subdirectory. **It is extremely important to delete the .htaccess file from the root of unzipped core before doing anything else** otherwise it will overwrite the current .htaccess file, which is customized and optimized for msf-me.org.

For example, make a subdirectory under public\_html and call it latestcore. Open that subdirectory and upload .zip file for the latest core (drupal-8-xx.zip) that was downloaded from Drupal org. This will create another subdirectory named drupal-8-xx under latestcore. Delete the .htaccess file from the drupal-8-xx directory.

Now it is safe to copy or move the files to the root directory of the website, public\_html, and overwrite all core files. Sometimes, it fails to copy certain directories, so it is best to move files instead of copying them in order to find out which ones did not move over. To overcome this problem, copy the remaining directories from the operating system. If you are not comfortable with Linux, request your technical person to do core updates. The copy command is: cp -arf /source/. /dest/

One core file needs to be updated to make the admin interface easier to use. From cPanel – File Manager, open the folder public\_html/modules/node and edit the file named node.pages.inc. Locate the following:

- a. 

```
function node_page_edit($node) {
  $type_name = node_type_get_name($node);
  drupal_set_title(t('@title', array('@type' => $type_name, '@title' => $node->title)),
  PASS_THROUGH);
  Remove the code that includes "Edit" from the drupal_set_title function in order for it to
  look as above.
```



```

b. function theme_node_add_list($variables) {
  $content = $variables['content'];
  $output = "";

  if ($content) {
    $output = '<dl class="node-type-list">';
    foreach ($content as $item) {
      if (!($item['title'] === 'Press release' || $item['title'] === 'Video' || $item['title'] === 'Role' || $item['title'] === 'Requirements' || $item['title'] === 'Take Action')) {
        $output .= '<dt>' . l($item['title'], $item['href'], $item['localized_options']) . '</dt>';
        $output .= '<dd>' . filter_xss_admin($item['description']) . '</dd>';
      }
    }
  }
}

```

Add the lines in bold above.

## 2. Drupal Error Log

There are rarely any errors in the error log, but it is a good practice to check it on a daily basis, just in case a new error pops up from a module upgrade or any other configuration changes. Use the filters at the top of the page to filter messages. The first four options are of concern; the rest are either warnings or information. Here's the error log messages page:

The screenshot shows the Drupal admin interface at <https://www.msf-me.org/admin/reports/dblog>. The top navigation bar includes 'Back to site', 'Manage', 'admin', 'Go to', and links for 'Dashboard', 'Content', 'Structure', 'Appearance', 'People', 'Modules', 'Configuration', and 'Reports'. The 'Reports' tab is active. The main content area is titled 'Recent log messages' and contains a sub-header: 'The Database logging module monitors your website, capturing system events in a log (shown here) to be reviewed by an authorized individual at a later time. This log is a list of recorded events containing usage data, performance data, errors, warnings and operational information. It is vital to check the Recent log messages report on a regular basis, as it is often the only way to tell what is going on.' Below this is a 'Filter log messages' section with dropdowns for 'Type' and 'Severity'. The 'Type' dropdown lists: access denied, Apache Solr Multisite, database\_logger, drush, filechecker, memcache, page not found, and php. The 'Severity' dropdown lists: emergency, alert, critical, error, warning, notice, info, and debug. A 'Filter' button is next to the severity dropdown, and a 'Reset' button is to its right. Below the filter is a 'Clear log messages' button. At the bottom is a table with columns: Type, Date, Message, User, and Operations. A note at the bottom of the table says 'No log messages available.'

## 3. Manually Adding Articles to Node Queues

It is sometimes not possible to find your article when adding it to a node queue. To add it manually:

- Paste the title in the input box, for example: Because I'm a woman... [nid: 2818]
- Then press the “Add” button. Do the English first, then the Arabic in the same manner.



Note that the spaces have to be exact, a space after the title and a space after the ":".

#### 4. Updating Custom Website Data

Some website data is not accessible from the Drupal Admin. To update such data, one needs to log in to cPanel and access phpMyAdmin. **Knowledge of MySQL is a must to perform this task.**

For MSF-ME address and other default settings, you may find them in the following database table:

```
SELECT `realm_key`, `name`, `value` FROM `variable_store` ORDER BY realm_key DESC, `name` ASC
```

<u>realm key</u>	<u>name</u>	<u>value</u>
en	all_blog_posts	Blog posts [1611]
en	all_opinion_debate	Opinion and debate [1607]
en	all_stories	Stories [2407]
en	cta_front_subtitle	Independent. Neutral. Impartial. Funded by individ...
en	cta_front_title	Medical aid where it's needed most
en	maintenance_mode_message	MEDECINS SANS FRONTIERES - Middle East is currentl...
en	main_donation_link	Donate https://www.msf-me.org/node/2512
en	msf_offices_list	International (English) http://www.msf.org Argent...
en	postal_address	<strong>Regional Office</strong>   Concord Tow...
en	site_404	search404

<u>realm key</u>	<u>name</u>	<u>value</u>
en	site_name	MEDECINS SANS FRONTIERES - MIDDLE EAST
en	site_slogan	Emergency medical aid where it's needed most
en	three_footer_links_real	node/363>Contact Us node/277 Terms and Conditions...
ar	all_blog_posts	Blog posts [1703]
ar	all_opinion_debate	Opinion and debate [1607]
ar	all_stories_arabic	Stories [2747]
ar	cta_front_subtitle	مسنقة. غير متحايدة. محابية. مولدة من أفراد متراك.
ar	cta_front_title	مساعدات طبية حيث الحاجة إليها أكثر
ar	main_donation_link	تبرع https://www.msf-me.org/ar/node/2648
ar	msf_offices_list	الدولية http://www.msf.org الأرجنتين http://www....
ar	postal_address	<div style="direction:rtl;"> <span style="float:r...>
ar	site_403	node/2408
ar	site_404	node/2347
ar	site_frontpage	Front
ar	site_name	أطباء بلا حدود - الشرق الأوسط

Note that all custom non-Drupal tables start with cm\_. To find out which email is attached to which department in the contact us form, list the contents of the following table:

```
SELECT * FROM `cm_custom_enquiry`
```



<u><b>id</b></u>	<u><b>department</b></u>	<u><b>department ar</b></u>	<u><b>admin email</b></u>
1	Human Resources	الموارد البشرية	<a href="mailto:recruitmentuae@paris.msf.org">recruitmentuae@paris.msf.org</a>
2	Communications	تبادل المعلومات	Rasha.AHMED@paris.msf.org, Maha.ODA@paris.msf.org
3	Fundraising	جمع التبرعات	aida.saifi@paris.msf.org, rana.elamin@paris.msf.o...
7	Volunteering	التطوع	volunteeruae@paris.msf.org
8	General Enquiries	استفسارات عامة	msfuae@paris.msf.org

The jobs are listed in the cm\_job table. For a job post to show under the Current Vacancies list, it must be added to this table.

## 5. Adding/Modifying Article Type

In case an article type needs to be modified, access Taxonomy from the Structure menu item, click on “list terms”, then edit the desired type. For example, let's say you need to change Opinion and debate to Opinion and add Debate as a new type.

Once you have changed the title from Opinion and debate to Opinion in both Arabic and English, you will need to modify the Arabic and English jQuery files located in the folder: public\_html/sites/all/modules/features/bscms\_apache\_solr\_search/js

Open the files: bscms\_apache\_solr\_search.js and bscms\_apache\_solr\_search-ar.js then locate the following code:

```
switch (atype) {
  case "3":
    x['article_type'] = "Blog Post";
    break;
```

Modify the article type accordingly.

To add a new article type, first add the type in taxonomy, then display the following database table to find the ID of the new record:

```
select tid, name from taxonomy_term_data where vid = 5
```



<u>tid</u>	<u>name</u>
3	Blog post
2084	Month in focus
1243	Opinion and debate
2083	Other
2085	Photostory
1238	Press release
2086	Statement
4	Story
2082	Video

Add the new article type using its ID to the jQuery code shown above.

For an article with the new article type to display properly, a few steps need to be taken:

- Open Context under the Structure menu option and add `node_content_new_type` (i.e., `node_content_debate`) by cloning one of the existing entries, such as `node_content_month_in_focus`. Once opened, modify the title and description, then click on the node type link to enter a new type. Then click the Save button.
- Clone `check_is_month_in_focus` to create `check_is_new_type` (i.e. `check_is_debate`). Click the Taxonomy link and select the new type from the dropdown menu. Don't forget to save the record.
- Open the folder `public_html/sites/all/modules/features/bscms_content_type_article` from File Manager in cPanel and modify the following files (assuming that the new type is `story/stories`):
  - Add the `node_content_new_type` and `check_is_new_type` to **`bscms_content_type_article.info`** by copying and following the example of existing code.

`features[context][] = check_is_story`

`features[context][] = node_content_stories`

- Add block of code by copying one of the existing ones (i.e. search for `press_release` and follow the example) to



**bscms\_content\_type\_article.context.inc**. There are two blocks of code starting with \$context = new stdClass(); and ending with \$export[... one for check\_is\_ and the other one for node\_content\_. Remember to change the type ID and titles to match the new article type.

```
$context = new stdClass();
  $context->disabled = FALSE; /* Edit this to true to make a default
context disabled initially */
  $context->api_version = 3;
  $context->name = 'check_is_story';
  $context->description = '';
  $context->tag = 'Check Conditions';
  $context->conditions = array(
    'node_taxonomy' => array(
      'values' => array(
        4 => 4,
      ),
      'options' => array(
        'node_form' => '0',
      ),
    ),
  );
$context->reactions = array(
  'theme_html' => array(
    'class' => 'template-banner template-story',
  ),
);
$context->condition_mode = 0;

// Translatables
// Included for use with string extractors like potx.
t('Check Conditions');
$export["check_is_story"] = $context;
```

```
$context = new stdClass();
  $context->disabled = FALSE; /* Edit this to true to make a default
context disabled initially */
  $context->api_version = 3;
  $context->name = 'node_content_stories';
  $context->description = 'Blocks in article pages - Stories';
  $context->tag = 'Articles';
  $context->conditions = array(
    'entity_field' => array(
      'values' => array(
```



```
'entity_type' => 'a:1:{s:4:"node";s:4:"node";}',
'field_name' => 'field_article_type',
'field_status' => 'match',
'field_value' => '4',
),
),
),
'node' => array(
  'values' => array(
    'article' => 'article',
  ),
),
'options' => array(
  'node_form' => '0',
),
),
),
);
$context->reactions = array(
  'block' => array(
    'blocks' => array(
      'bscms_big_photo_helpers-big_photo_story' => array(
        'module' => 'bscms_big_photo_helpers',
        'delta' => 'big_photo_story',
        'region' => 'bigphoto',
        'weight' => '-10',
      ),
      ),
      ),
    );
),
),
),
);
$context->condition_mode = 1;

// Translatables
// Included for use with string extractors like potx.
t('Articles');
t('Blocks in article pages - Stories');
$export['node_content_stories'] = $context;
```

Change the bolded text above to match the new type ID and title.

Note that you will need to **clear the Cache** from the **Performance** link under the Configuration menu option in Drupal admin for changes to be implemented. This applies mainly to changes in CSS and JS files. You might not need to do so when changing HTML or PHP files.



## 6. Embedding External Links in Iframes

To access external and internal sites, such as the donation form, that are not part of Drupal but are part of our platform. To show the same footer and header of msf-me.org, we need to embed the links in an iframe. Since we have a secure site (https), we cannot embed non-secure content (http). We can only embed secure content (https).

Depending on the output, you can create full-screen content using the Index (only normal index) or partial-screen with a side menu using the Standard Page.

## 7. Job Application Platform

The latest project assigned to MSF UAE is to embed the UK job application platform. This was already implemented in an Index content named “MENA Job Application Form”. This form embeds the UK job application platform by typing the following HTML code in the article’s body. You will need to switch to a plain text editor (link under the body field) to embed the code:

```
<div class="mena-job-container">
<iframe allowfullscreen="" allowtransparency="true" frameborder="0" scrolling="no"
src="https://hero.msf-
application.com/hero/Form1.aspx?sectionId=68&AspxAutoDetectCookieSupport=1"
>
</iframe>
</div>
```

Note that it uses a div class, mena-job-container, that was created in main.css inside public\_html/sites/all/themes/bscmstv/assets/css/en folder. If you are also implementing the same class for Arabic, you will need to include it in the main.css in the “ar” subfolder under assets/css.

The latest issue with the embedded UK job application website is that it does not work on mobile phones because it was not coded in Bootstrap; it is rather based on fixed-width tables.

You will need to check with the UK contact person and understand the issues he is facing using the desktop version.

For the time being, a message is displayed at the top that this page does not work on mobiles or devices lower than 1100px in width.

## 8. Paris Vacancies in Iframes

Job vacancies from Paris are also embedded in iframes, just search for Vacancy + Index + Published and edit the content to view the body’s HTML code. The links for those come from the following website:



[https://recrutement.msf.fr/iframe/jobFieldSpecific/20007/en\\_GB](https://recrutement.msf.fr/iframe/jobFieldSpecific/20007/en_GB)

Use the links for the position to embed. You may also add the job title as shown in the example below:

```
<h1 style="color:#ee0000; margin-top:150px">HR Coordinator Vacancy - Iraq</h1>  
<p><iframe allowtransparency="true" class="job-frame" frameborder="0" height="6000" scrolling="no" src="https://recrutement.msf.fr/offer/coordinateur-rh-irak-h-field/1/20003/en_GB" style="margin-top:-25px"></iframe></p>
```

**Note that for your job vacancy to appear under Current Vacancies, you will need to add it to the cm\_job database table using phpMyAdmin in cPanel.**

## [9. Converting PDF Files to Word](#)

Every once in a while, we receive PDF files to publish on our website, especially job vacancies from other MSF offices. If you happen to have the latest Office version installed on your laptop, then you may open the PDF file in Word, and Word will automatically convert it.

However, if you don't have the latest Office suite, then use the following website:

[https://www.ilovepdf.com/pdf\\_to\\_word](https://www.ilovepdf.com/pdf_to_word)



# Custom Applications and Data

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## 1. Custom Applications

The “common” folder under public\_html contains the common code classes used by all other custom applications and Drupal PHP files. It is extremely critical not to change those classes; otherwise, many applications will no longer work as designed.

The custom applications are:

- a. Donation in the donatenow folder. The application uses a money converter link from Google to convert all currencies into AED. The Arabic donation page uses a translation service from Azure to translate donors' details from Arabic to English to avoid reentry on the Network International (NI) website because NI does not currently accept Arabic text. Note that an Outlook account is required to access Azure. I used [maan.khalife@paris.msf.org](mailto:maan.khalife@paris.msf.org) to activate that service, but this account is currently disabled. This means that if things change from Azure's side, the translation service will stop working. It is best to use an active Outlook account and regenerate the access key for the service, then replace it in the code. This is found in the /public\_html/donatenow/ar/TranslateArray.php:

```
function Translate($inputStrArr) {
    try {
        //Client Secret key of the application.
        $clientSecret = "5f1a1dcc974041ac88fe8d8fb96a0da0";
```

- b. The newsletter subscription form is under common/ar for Arabic and common/en for English. Note that the code integrates with our MailChimp database through the MailChimp API using the MailChimp.php class file in the common/class folder.
- c. The contact us form is under common/ar for Arabic and common/en for English
- d. The HR forms, such as Current Vacancies, are under the hr folder.

## 2. Managing/Viewing Custom Data

The custom data administrator is located at: <https://www.msf-me.org/adm/>

The username is admin, and the password is the same as the current Drupal admin password.

The rest is self-explanatory.



### 3. Microsites

We have the following microsites that are accessible through Drupal content published at msf-me.org:

- a. grid.msf-me.org which is a jQuery grid library that we use to lookup sample code to further develop our custom data admin pages. This is not accessible from anywhere at msf-me.org.
- b. iwd-ar.msf-me.org which is a custom microsite for International Women's day in Arabic only. Other languages are hosted somewhere else. The Arabization of the latest IWD microsite was assigned to another MSF office.
- c. mweso.msf-me.org is a custom microsite in Arabic and English for Mental Health.
- d. rsp.msf-me.org is a custom microsite in Arabic and English for the Reconstructive Surgery Program of Amman, Jordan.



# Website Improvements

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## 1. Backend

As far as I know, there are no flaws in the backend, the Drupal administrator. There could always be improvements, such as changing how to search for the parent menu item when creating an article. There is also a reminder date under Publishing options of an article that does not work. However, these are not show stoppers.

## 2. Skills

In short, the main skills required to support this website and its self-managed server are:

- a. Understanding Drupal architecture
- b. Installing and removing Drupal modules
- c. Understanding how the major Drupal modules work and how to configure them
- d. Expertise in Linux
- e. Configuring Apache and PHP
- f. Installing libraries and modules from Linux or WHM
- g. Expertise in HTML, especially in handling Arabic text (right-to-left)
- h. Expertise in PHP development and MySQL database
- i. Expertise in JavaScript and jQuery
- j. API integration using PHP, such as integrating custom applications with PayPal, Network International, MailChimp, Google money exchange, and Azure Cloud services.

## 3. Future

Any website has a lifespan if the requirements are met. In general, the average lifespan of a website is about 2-3 years before upgrading or doing anything major, such as changing the theme or upgrading to a new version of Drupal.

Upgrading to a newer Drupal version is obviously possible, but should not be taken lightly, especially since we have a multilingual site.

Always check website performance: <https://gtmetrix.com/>