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Tahapan Instalasi Web Server

1. Menyiapkan File & Membuat Folder Yang Dibutuhkan


Download terlebih dahulu file yang dibutuhkan untuk instalasi web server, yaitu :

a. Apache



Link : <https://www.apachelounge.com/download/>

b. PHP



Link : <http://windows.php.net/qa/>

c. MySQL



Link : <http://dev.mysql.com/downloads/mysql/>

d. Microsoft Visual Studio 2015-2019

support.microsoft.com/id-id/help/2977003/the-latest-supported-visual-c-downloads

Ringkasan

Artikel ini mencantumkan tautan unduhan untuk versi terbaru Microsoft Visual C++.

Visual Studio 2015, 2017, dan 2019

Unduh Microsoft Visual C++ Redistributable untuk Visual Studio 2015, 2017, dan 2019. Pembaruan berikut adalah paket distribusi ulang terakhir Visual C++ untuk Visual Studio 2015, 2017, dan 2019 yang mendapat dukungan. Termasuk di dalamnya ialah versi dasar durasi Universal C, lihat [MSDN](#) untuk rincian.

- x86: [vc_redist.x86.exe](#)
- x64: [vc_redist.x64.exe](#)
- ARM64: [vc_redist.arm64.exe](#)





Catatan Visual C++ 2015, 2017 dan 2019 seluruhnya berbagi file distribusi ulang yang sama.

Sebagai contoh, menginstal Visual C++ 2019 yang dapat didistribusikan ulang, akan mempengaruhi program yang dibangun dengan Visual C++ 2015 dan 2017. Meskipun demikian, menginstal Visual C++ 2015 yang dapat didistribusi ulang tidak akan menggantikan versi yang lebih baru dari file yang diinstal oleh Visual C++ 2017 dan 2019 yang dapat didistribusi ulang.
















Hal ini berbeda dari semua versi Visual C++ sebelumnya, karena masing-masing memiliki file runtime sendiri yang berbeda, tidak dibagi dengan versi lain.

Link : <https://support.microsoft.com/id-id/help/2977003/the-latest-supported-visual-c-downloads>

Berikut ini adalah file yang sudah kita download

PC > DATA (D:) > Tugas > Semester 4 > Pemrograman Web > Web Server >				
Name	Date modified	Type	Size	
 httpd-2.4.41-win64-VS16.zip	31/03/2020 20:40	WinRAR ZIP archive	10.113 KB	
 mysql-8.0.19-win64.zip	31/03/2020 20:57	WinRAR ZIP archive	192.311 KB	
 php-7.4.4RC1-Win32-vc15-x64.zip	31/03/2020 20:55	WinRAR ZIP archive	25.491 KB	
 VC_redist.x64.exe	31/03/2020 20:59	Application	14.624 KB	

Langkah selanjutnya adalah membuat folder yang diperlukan sebagai tempat instalasi web server dan lokasi dokumen web, berada dalam drive (C:).

PC > Local Disk (C:) >				
Name	Date modified	Type	Size	
 AdwCleaner	14/07/2019 21:39	File folder		
 BCS	06/03/2019 23:35	File folder		
 BDE32	06/03/2019 23:34	File folder		
 Borland	06/03/2019 23:29	File folder		
 ESD	17/04/2019 22:48	File folder		
 inetpub	17/02/2020 7:29	File folder		
 Intel	21/05/2016 16:54	File folder		
 Logs	10/09/2015 12:39	File folder		
 PerfLogs	19/03/2019 11:52	File folder		
 Program Files	27/03/2020 16:16	File folder		
 Program Files (x86)	27/03/2020 16:12	File folder		
 Server	31/03/2020 21:29	File folder		
 temp	16/02/2020 18:12	File folder		
 Users	16/02/2020 18:17	File folder		
 Windows	31/03/2020 21:21	File folder		

Pertama, kita membuat folder yang bernama “Server”. Kemudian buatlah 2 folder yang masing-masing diberi nama “bin” dan “data”.

This PC > Local Disk (C:) > Server >

Name	Date modified	Type	Size
bin	31/03/2020 21:29	File folder	
data	31/03/2020 21:29	File folder	

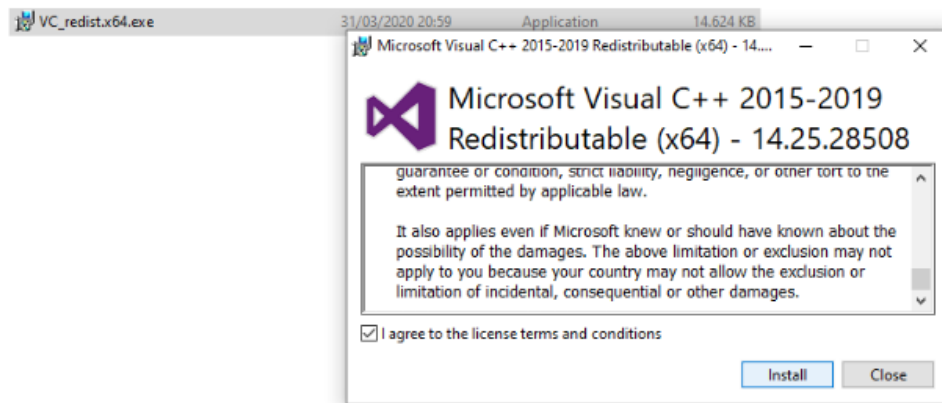
Folder “bin” berfungsi sebagai lokasi instalasi Apache, PHP dan MySQL. Kemudian dalam folder “data” buatlah 2 folder yang masing-masing diberi nama “DB” dan “htdocs”.

This PC > Local Disk (C:) > Server > data >

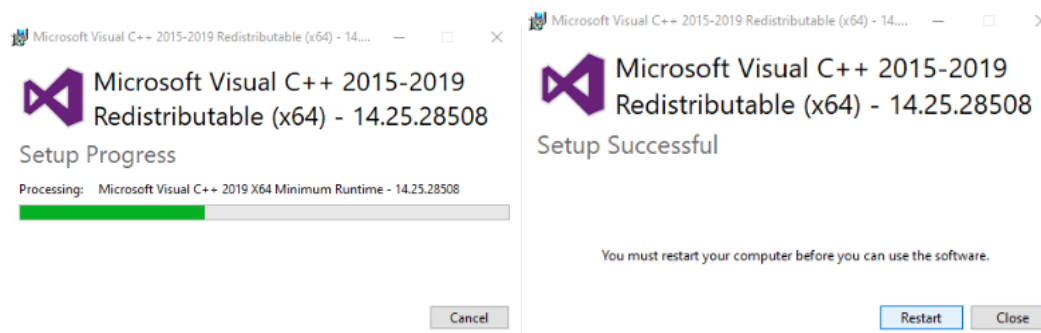
Name	Date modified	Type	Size
DB	31/03/2020 21:30	File folder	
htdocs	31/03/2020 21:30	File folder	

2. Proses Instalasi Microsoft Visual Studio 2015-2019

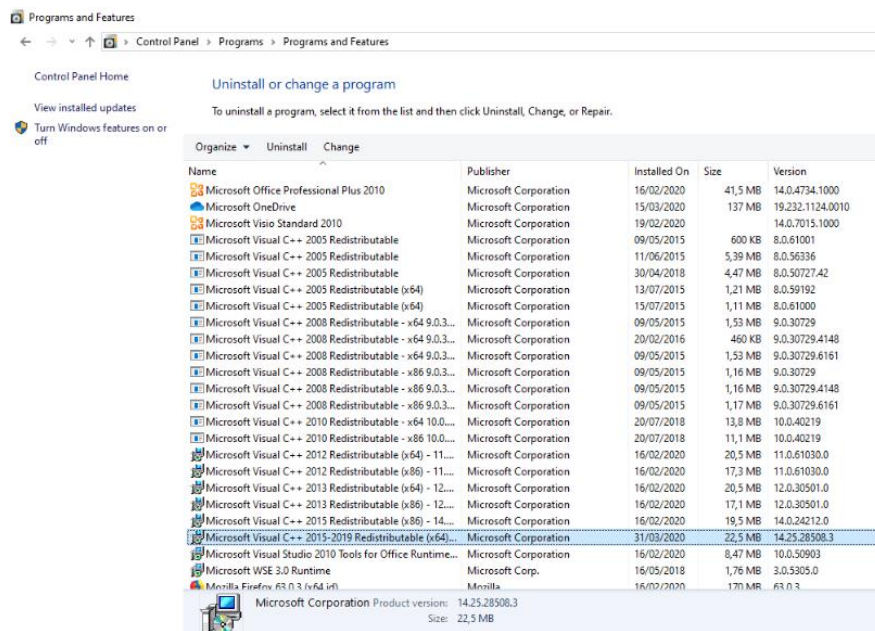
Pertama, jalankan file “VC_redist.x64.exe”, kemudian klik checklist “I agree to the license terms and conditions” lalu klik Install.



Tunggu Beberapa saat hingga proses selesai kemudian klik Restart untuk merestart komputer.

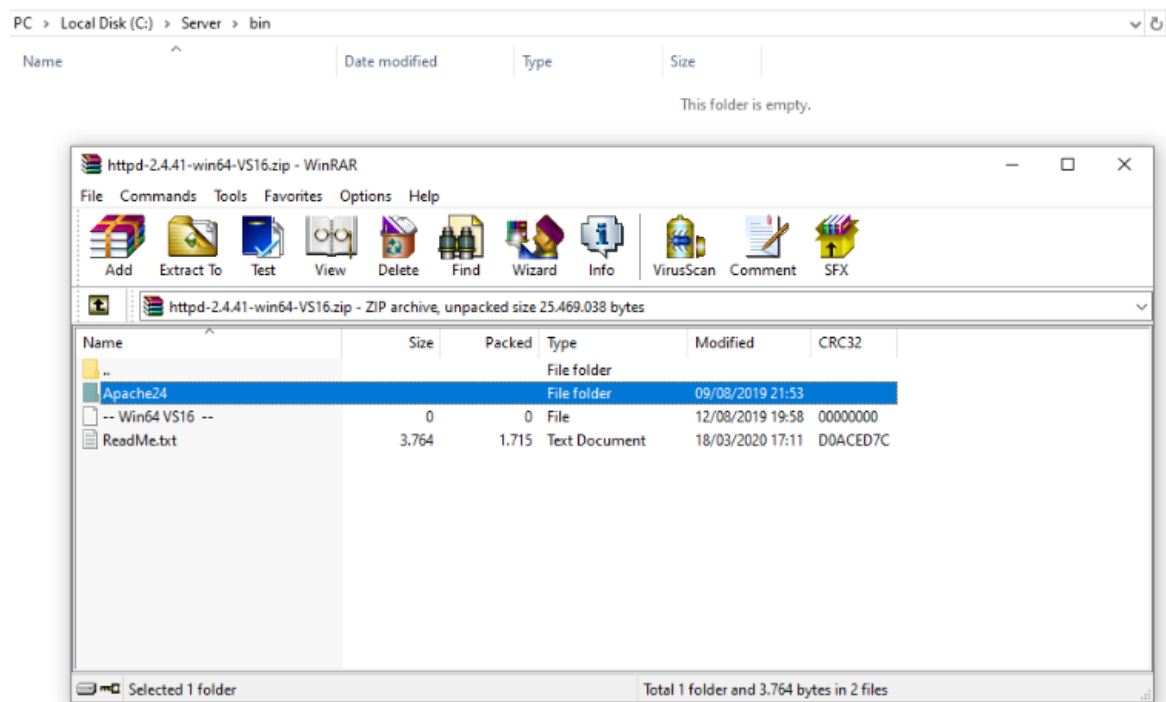


Setelah itu, cek “Control Panel\Programs\Programs and Features” untuk mengetahui sudah terinstall atau belum.

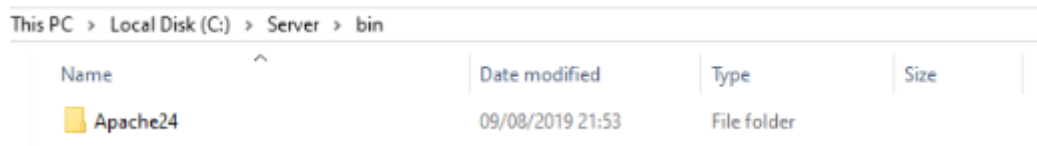


3. Proses Instalasi Apache

Buka file “httpd-2.4.41-win64-VS16.zip” yang sudah didownload tadi, kemudian ekstrak ke C:\Server\bin.



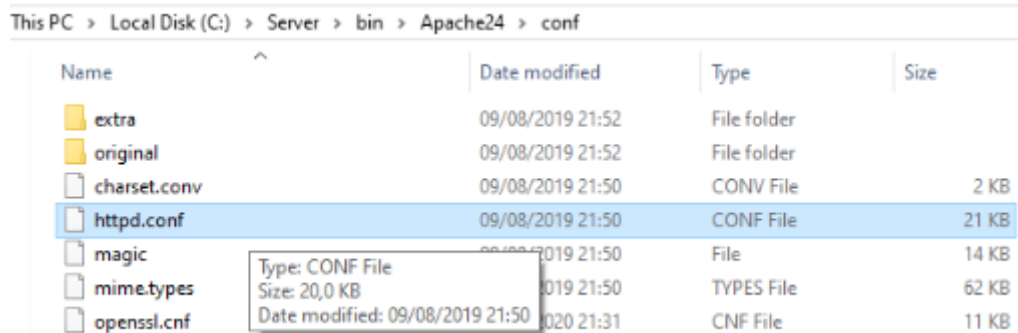
Hasilnya.



Setelah berhasil diekstrak maka proses instalasi Apache dinyatakan berhasil.

4. Proses Konfigurasi Apache

Langkah pertama dalam mengkonfigurasi Apache adalah membuka file "httpd.conf" dengan teks editor.

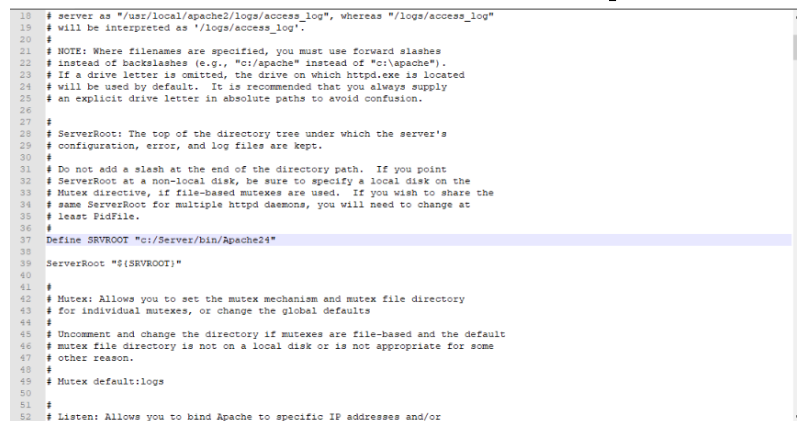


Setelah itu ubah kode:

Define SRVROOT "c:/Apache24"

Menjadi

Define SRVROOT "c:/Server/bin/Apache24"

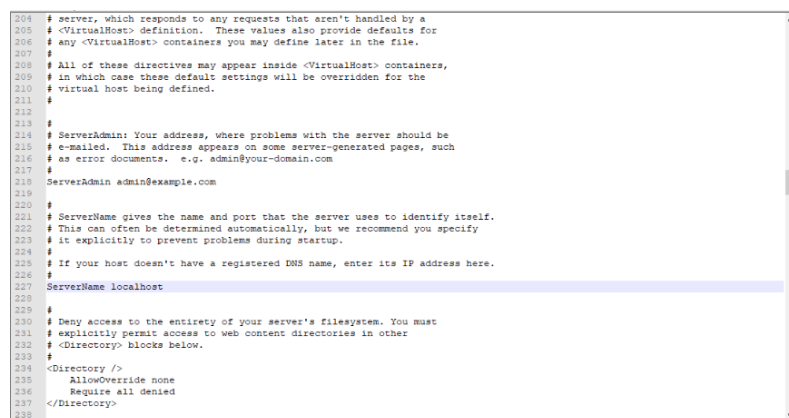


Ubah

#ServerName www.example.com:80

Menjadi

ServerName localhost



Ubah

DocumentRoot "\${SRVROOT}/htdocs"

Menjadi

DocumentRoot "c:/Server/data/htdocs/"

```
230 # Deny access to the entirety of your server's filesystem. You must
231 # explicitly permit access to web content directories in other
232 # <Directory> blocks below.
233 #
234 <Directory />
235     AllowOverride none
236     Require all denied
237 </Directory>
238 #
239 #
240 # Note that from this point forward you must specifically allow
241 # particular features to be enabled - so if something's not working as
242 # you might expect, make sure that you have specifically enabled it
243 # below.
244 #
245 #
246 #
247 # DocumentRoot: The directory out of which you will serve your
248 # documents. By default, all requests are taken from this directory, but
249 # symbolic links and aliases may be used to point to other locations.
250 #
251 DocumentRoot "c:/Server/data/htdocs/"
252 <Directory "${SRVROOT}/htdocs">
253     #
254     # Possible values for the Options directive are "None", "All",
255     # or any combination of:
256     #   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI MultiViews
257     #
258     # Note that "MultiViews" must be named "explicitly" --- "Options All"
259     # doesn't give it to you.
260     #
261     # The Options directive is both complicated and important. Please see
262     # http://httpd.apache.org/docs/2.4/mod/core.html#options
263     # for more information.
264     #
```

Ubah

<Directory "\${SRVROOT}/htdocs">

Menjadi

<Directory "c:/Server/data/htdocs/">

```
236     Require all denied
237 </Directory>
238 #
239 #
240 # Note that from this point forward you must specifically allow
241 # particular features to be enabled - so if something's not working as
242 # you might expect, make sure that you have specifically enabled it
243 # below.
244 #
245 #
246 #
247 # DocumentRoot: The directory out of which you will serve your
248 # documents. By default, all requests are taken from this directory, but
249 # symbolic links and aliases may be used to point to other locations.
250 #
251 DocumentRoot "c:/Server/data/htdocs/"
252 <Directory "c:/Server/data/htdocs/">
253     #
254     # Possible values for the Options directive are "None", "All",
255     # or any combination of:
256     #   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI MultiViews
257     #
258     # Note that "MultiViews" must be named "explicitly" --- "Options All"
259     # doesn't give it to you.
260     #
261     # The Options directive is both complicated and important. Please see
262     # http://httpd.apache.org/docs/2.4/mod/core.html#options
263     # for more information.
264     #
265     Options Indexes FollowSymLinks
266     #
267     # AllowOverride controls what directives may be placed in .htaccess files.
268     # It can be "All", "None", or any combination of the keywords:
269     #   AllowOverride FileInfo AuthConfig Limit
270     #
```

Ubah

DirectoryIndex index.html

Menjadi

DirectoryIndex index.php index.html index.htm

```
268 # AllowOverride controls what directives may be placed in .htaccess files.
269 # It can be "All", "None", or any combination of the keywords:
270 #   AllowOverride FileInfo AuthConfig Limit
271 #
272 AllowOverride None
273 #
274 #
275 # Controls who can get stuff from this server.
276 #
277 Require all granted
278 </Directory>
279 #
280 #
281 # DirectoryIndex: sets the file that Apache will serve if a directory
282 # is requested.
283 #
284 <IfModule dir_module>
285     DirectoryIndex index.php index.html index.htm
286 </IfModule>
287 #
288 #
289 # The following lines prevent .htaccess and .htpasswd files from being
290 # viewed by Web clients.
291 #
292 <Files ".ht*">
293     Require all denied
294 </Files>
295 #
296 #
297 # ErrorLog: The location of the error log file.
298 # If you do not specify an ErrorLog directive within a <VirtualHost>
299 # container, error messages relating to that virtual host will be
300 # logged here. If you "do" define an error logfile for a <VirtualHost>
301 # container, that host's errors will be logged there and not here.
302 #
```



```
# AllowOverride controls what directives may be placed in
# .htaccess files.
# It can be "All", "None", or any combination of the keywords:
# AllowOverride FileInfo AuthConfig Limit
#
AllowOverride None
```

```
# AllowOverride controls what directives may be placed in
.htaccess files.
# It can be "All", "None", or any combination of the keywords:
# AllowOverride FileInfo AuthConfig Limit
#
AllowOverride All
```

Ubah

Menjadi

```

140 #LoadModule proxy_balancer_module modules/mod_proxy_balancer.so
141 #LoadModule proxy_connect_module modules/mod_proxy_connect.so
142 #LoadModule proxy_express_module modules/mod_proxy_express.so
143 #LoadModule proxy_fcgi_module modules/mod_proxy_fcgi.so
144 #LoadModule proxy_ftp_module modules/mod_proxy_ftp.so
145 #LoadModule proxy_hcheck_module modules/mod_proxy_hcheck.so
146 #LoadModule proxy_html_module modules/mod_proxy_html.so
147 #LoadModule proxy_http_module modules/mod_proxy_http.so
148 #LoadModule proxy_http2_module modules/mod_proxy_http2.so
149 #LoadModule proxy_sgi_module modules/mod_proxy_sgi.so
150 #LoadModule proxy_uwsgi_module modules/mod_proxy_uwsgi.so
151 #LoadModule proxy_vstunnel_module modules/mod_proxy_vstunnel.so
152 #LoadModule ratelimit_module modules/mod_ratelimit.so
153 #LoadModule reflector_module modules/mod_reflector.so
154 #LoadModule remotesip_module modules/mod_remotesip.so
155 #LoadModule request_module modules/mod_request.so
156 #LoadModule reqtimeout_module modules/mod_reqtimeout.so
157 #LoadModule rewrite_module modules/mod_rewrite.so
158 #LoadModule sed_module modules/mod_sed.so
159 #LoadModule session_module modules/mod_session.so
160 #LoadModule session_cookie_module modules/mod_session_cookie.so
161 #LoadModule session_crypto_module modules/mod_session_crypto.so
162 #LoadModule session_dbd_module modules/mod_session_dbd.so
163 #LoadModule setenvif_module modules/mod_setenvif.so
164 #LoadModule slotmem_plain_module modules/mod_slotmem_plain.so
165 #LoadModule slotmem_shm_module modules/mod_slotmem_shm.so
166 #LoadModule ssoache_dlm_module modules/mod_ssoache_dlm.so
167 #LoadModule ssoache_memcache_module modules/mod_ssoache_memcache.so
168 #LoadModule ssoache_redis_module modules/mod_ssoache_redis.so
169 #LoadModule ssoache_shmcb_module modules/mod_ssoache_shmcb.so
170 #LoadModule spelling_module modules/mod_spelling.so
171 #LoadModule ssl_module modules/mod_ssl.so
172 #LoadModule status_module modules/mod_status.so
173 #LoadModule substitute_module modules/mod_substitute.so
174 #LoadModule unique_id_module modules/mod_unique_id.so

```

Langkah selanjutnya adalah buka cmd atau windows powershell kemudian run as administrator lalu copykan kode berikut :

```
"c:\Server\bin\Apache24\bin\httpd.exe -k install"
```

```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

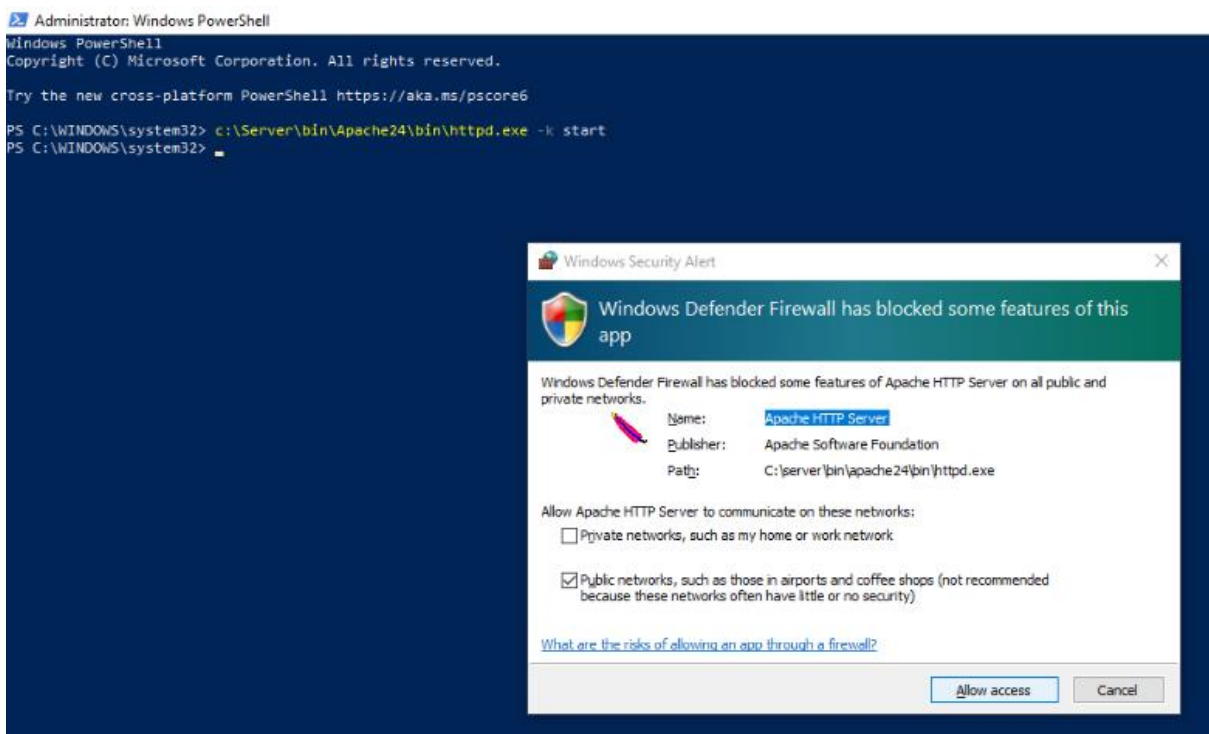
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\WINDOWS\system32> c:\Server\bin\Apache24\bin\httpd.exe -k install
>>
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
Testing httpd.conf...
Errors reported here must be corrected before the service can be started.
(OS 10013)An attempt was made to access a socket in a way forbidden by its access permissions. : AH00072: make_sock: could not bind to address [::]:80
(OS 10013)An attempt was made to access a socket in a way forbidden by its access permissions. : AH00072: make_sock: could not bind to address 0.0.0.0:80
AH00451: no listening sockets available, shutting down
AH00015: Unable to open logs
PS C:\WINDOWS\system32>
```

Jika muncul kode tersebut maka Apache sudah terinstal dengan sukses namun apabila muncul kode error seperti itu maka artinya port 80 sudah digunakan oleh suatu aplikasi/services dan kita harus memasukan kode ini didalam cmd untuk menghentikan HTTP service, yaitu “NET stop HTTP”.

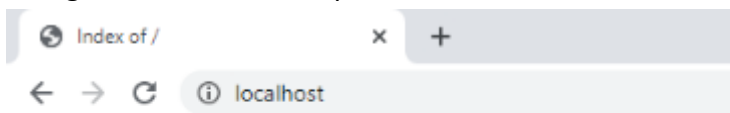
Setelah tidak ada masalah, kita masukan kode berikut ke cmd :

“c:\Server\bin\Apache24\bin\httpd.exe -k start”



Klik Allow access.

Kemudian kita buka browser untuk mengecek instalasi yang berhasil, yaitu dengan mengetikkan “localhost” pada kolom search browser.



Index of /

Proses konfigurasi Apache telah berhasil.

5. Proses Instalasi PHP

Langkah pertama yaitu membuat folder PHP di dalam “C:\Server\bin”. Setelah itu ekstrak file “php-7.4.4RC1-Win32-vc15-x64.zip” ke dalam folder PHP tersebut.

This PC > Local Disk (C:) > Server > bin >

Name	Date modified	Type	Size
Apache24	09/08/2019 21:53	File folder	
mysql-8.0	31/03/2020 23:08	File folder	
PHP	31/03/2020 23:22	File folder	

PC > Local Disk (C:) > Server > bin > PHP

php-7.4.4RC1-Win32-vc15-x64.zip - WinRAR

File Commands Tools Favorites Options Help

Add Extract To Test View Delete Find Wizard Info VirusScan Comment SFX

php-7.4.4RC1-Win32-vc15-x64.zip - ZIP archive, unpacked size 70,102,990 bytes

Name	Size	Packed	Type	Modified	CRC32
..			File folder		
dev			File folder	03/03/2020 22:36	
ext			File folder	03/03/2020 22:36	
extras			File folder	03/03/2020 22:44	
lib			File folder	03/03/2020 22:36	
sasl2			File folder	03/03/2020 22:36	
deplister.exe	119.808	62.539	Application	03/03/2020 22:36	588E6802
glib-2.dll	1.374.720	562.766	Application exten...	03/03/2020 22:36	00D84C25
gmodule-2.dll	18.432	8.545	Application exten...	03/03/2020 22:36	DDA54E82
icudt65.dll	27.980.288	10.796.874	Application exten...	03/03/2020 22:36	1DF54F47
icuini65.dll	2.632.192	1.017.301	Application exten...	03/03/2020 22:36	D0C3EA8D
icuio65.dll	61.440	27.626	Application exten...	03/03/2020 22:36	39B99837
icuuc65.dll	1.890.304	795.657	Application exten...	03/03/2020 22:36	8D2CE469

Selected 5 folders and 52,391,437 bytes in 33 files

Total 5 folders and 52,391,437 bytes in 33 files

PC > Local Disk (C:) > Server > bin > PHP

Name	Date modified	Type	Size
dev	03/03/2020 22:36	File folder	
ext	03/03/2020 22:36	File folder	
extras	03/03/2020 22:44	File folder	
lib	03/03/2020 22:36	File folder	
sasl2	03/03/2020 22:36	File folder	
deplister.exe	03/03/2020 22:36	Application	117 KB
glib-2.dll	03/03/2020 22:36	Application exten...	1.343 KB
gmodule-2.dll	03/03/2020 22:36	Application exten...	18 KB
icudt65.dll	03/03/2020 22:36	Application exten...	27.325 KB
icuini65.dll	03/03/2020 22:36	Application exten...	2.571 KB
icuio65.dll	03/03/2020 22:36	Application exten...	60 KB
icuuc65.dll	03/03/2020 22:36	Application exten...	1.846 KB
libcrypto-1_1-x64.dll	03/03/2020 22:36	Application exten...	3.342 KB
libenchant.dll	03/03/2020 22:36	Application exten...	47 KB
libpq.dll	03/03/2020 22:36	Application exten...	276 KB
libsasl.dll	03/03/2020 22:36	Application exten...	106 KB
libsodium.dll	03/03/2020 22:36	Application exten...	294 KB
libsqlite3.dll	03/03/2020 22:36	Application exten...	1.302 KB
libssh2.dll	03/03/2020 22:36	Application exten...	275 KB
libssl-1_1-x64.dll	03/03/2020 22:36	Application exten...	664 KB
license.txt	03/03/2020 22:36	Text Document	4 KB
news.txt	03/03/2020 22:36	Text Document	70 KB
nghttp2.dll	03/03/2020 22:36	Application exten...	193 KB
phar.phar.bat	03/03/2020 22:44	Windows Batch File	1 KB
pharcommand.phar	03/03/2020 22:44	PHAR File	53 KB
php.exe	03/03/2020 22:36	Application	126 KB
php.ini-development	03/03/2020 22:36	INI-DEVELOPMEN...	73 KB
php.ini-production	03/03/2020 22:36	INI-PRODUCTION ...	73 KB

Kemudian buka file “httpd.conf” di dalam “c:\Server\bin\Apache24\conf” dan pada baris terakhir tambahkanlah kode berikut :

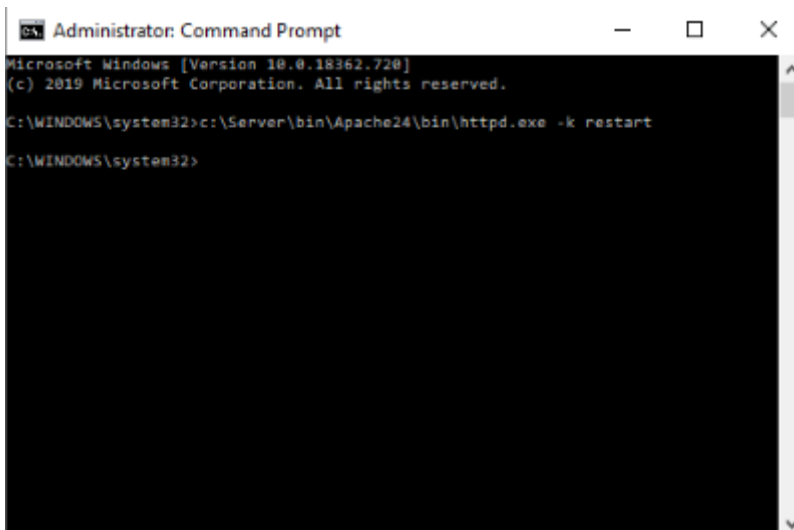
```
PHPIniDir "C:/Server/bin/PHP"
```

```
AddHandler application/x-httpd-php .php
```

```
LoadModule php7_module "C:/Server/bin/PHP/php7apache2_4.dll"
```

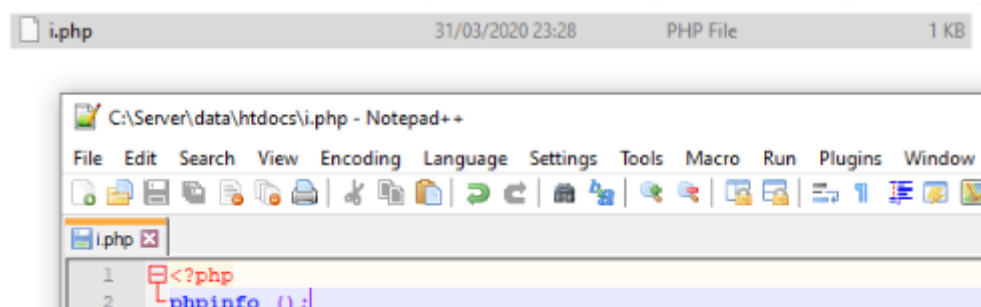
```
509 # Virtual hosts
510 #Include conf/extra/httpd-vhosts.conf
511
512 # Local access to the Apache HTTP Server Manual
513 #Include conf/extra/httpd-manual.conf
514
515 # Distributed authoring and versioning (WebDAV)
516 #Include conf/extra/httpd-dav.conf
517
518 # Various default settings
519 #Include conf/extra/httpd-default.conf
520
521 # Configure mod_proxy_html to understand HTML4/XHTML
522 <IfModule proxy_html_module>
523     Include conf/extra/proxy-html.conf
524 </IfModule>
525
526 # Secure (SSL/TLS) connections
527 #Include conf/extra/httpd-ssl.conf
528 #
529 # Note: The following must must be present to support
530 #       starting without SSL on platforms with no /dev/random equivalent
531 #       but a statically compiled-in mod_ssl.
532 #
533 <IfModule ssl_module>
534     SSLRandomSeed startup builtin
535     SSLRandomSeed connect builtin
536 </IfModule>
537
538
539 PHPIniDir "C:/Server/bin/PHP"
540 AddHandler application/x-httpd-php .php
541 LoadModule php7_module "C:/Server/bin/PHP/php7apache2_4.dll"
542
543
```

Selanjutnya buka cmd(run as administrator) untuk restart apache, masukkan kode berikut “c:\Server\bin\Apache24\bin\httpd.exe -k restart”.

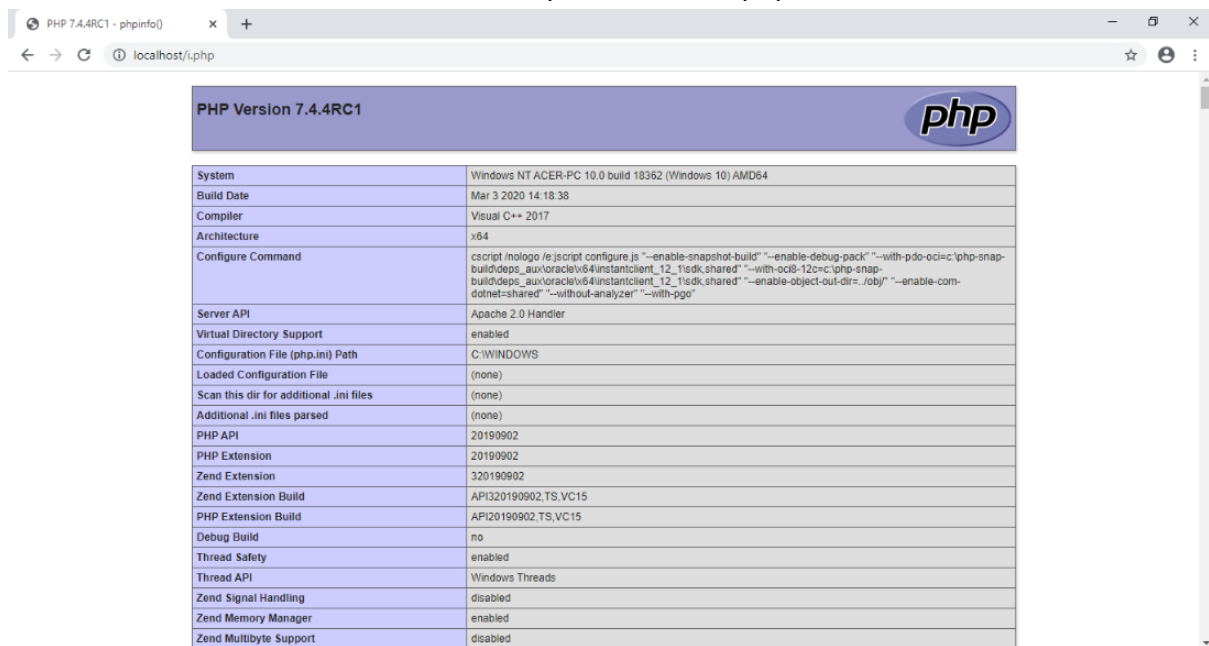


Lalu buatlah file bernama “i.php” dalam “c:\Server\data\htdocs” dan ketiklah kode berikut :

```
<?php
phpinfo ();
```



Buka browser lalu ketiklah alamat ini “http://localhost/i.php”.



PHP Version 7.4.4RC1	
System	Windows NT ACER-PC 10.0 build 18362 (Windows 10) AMD64
Build Date	Mar 3 2020 14:18:38
Compiler	Visual C++ 2017
Architecture	x64
Configure Command	cmdscript /nologo /e:script configure.js "--enable-snapshot-build" "--enable-debug-pack" "--with-pdo-oci=c:\php-snap-build\deps_aux\oracle\v64instantclient_12_1sdk\shared" "--with-oci8-12c-c:\php-snap-build\deps_aux\oracle\v64instantclient_12_1sdk\shared" "--enable-object-out-dir=.obj/" "--enable-com-dotnet=shared" "--without-analyzer" "--with-pgo"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\WINDOWS
Loaded Configuration File	(none)
Scan this dir for additional .ini files	(none)
Additional .ini files parsed	(none)
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902.TS.VC15
PHP Extension Build	API20190902.TS.VC15
Debug Build	no
Thread Safety	enabled
Thread API	Windows Threads
Zend Signal Handling	disabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled

Jika muncul tampilan seperti diatas maka proses instalasi PHP telah berhasil.

6. Proses Konfigurasi PHP

Langkah awal dalam proses ini adalah mengubah file “php.ini-development” menjadi “php.ini” yang berada di “c:\Server\bin\PHP”.

 php.ini-development ->  php.ini

Kemudian ubahlah kode berikut :

```
; extension_dir = "ext"
```

Menjadi

```
extension_dir = "C:\Server\bin\PHP\ext\"
```

```
740 ; The root of the PHP pages, used only if nonempty.
741 ; if PHP was not compiled with FORCE_REDIRECT, you SHOULD set doc_root
742 ; if you are running php as a CGI under any web server (other than IIS)
743 ; see documentation for security issues. The alternate is to use the
744 ; cgi.force_redirect configuration below
745 ; http://php.net/doc-root
746 doc_root =
747
748 ; The directory under which PHP opens the script using /-username used only
749 ; if nonempty.
750 ; http://php.net/user-dir
751 user_dir =
752
753 ; Directory in which the loadable extensions (modules) reside.
754 ; http://php.net/extension-dir
755 ;extension_dir = "."
756 ; On windows:
757 extension_dir = "C:\Server\bin\PHP\ext\"
758
759 ; Directory where the temporary files should be placed.
760 ; Defaults to the system default (see sys_get_temp_dir)
761 ;sys_temp_dir = "/tmp"
762
763 ; Whether or not to enable the dl() function. The dl() function does NOT work
764 ; properly in multithreaded servers, such as IIS or Zeus, and is automatically
765 ; disabled on them.
766 ; http://php.net/enable-dl
767 enable_dl = Off
768
769 ; cgi.force_redirect is necessary to provide security running PHP as a CGI under
770 ; most web servers. Left undefined, PHP turns this on by default. You can
771 ; turn it off here AT YOUR OWN RISK
772 ; **You CAN safely turn this off for IIS, in fact, you MUST.**
773 ; http://php.net/cgi.force-redirect
774 ;cgi.force_redirect = 1
```

Ubah

```
;extension=bz2
;extension=curl
;extension=fileinfo
;extension=gd2
;extension=gettext
```

```

;extension=gmp
;extension=intl
;extension=imap
;extension=interbase
;extension=ldap
;extension=mbstring
;extension=exif      ; Must be after mbstring as it depends on it
;extension=mysqli
;extension=oci8_12c  ; Use with Oracle Database 12c Instant Client
;extension=openssl
;extension=pdo_firebird
;extension=pdo_mysql
;extension=pdo_oci
;extension=pdo_odbc
;extension=pdo_pgsql
;extension=pdo_sqlite
;extension=pgsql
;extension=shmop

```

Menjadi

```

extension=bz2
extension=curl
extension=fileinfo
extension=gd2
extension=gettext
extension=gmp
extension=intl
extension=imap
;extension=interbase
extension=ldap
extension=mbstring
extension=exif      ; Must be after mbstring as it depends on it
extension=mysqli
;extension=oci8_12c  ; Use with Oracle Database 12c Instant Client
extension=openssl
;extension=pdo_firebird
extension=pdo_mysql
;extension=pdo_oci
extension=pdo_odbc
extension=pdo_pgsql
extension=pdo_sqlite
extension=pgsql
extension=shmop

```

```

903 ; Notes for Windows environments :
904 ;
905 ; - Many DLL files are located in the extensions/ (PHP 4) or ext/ (PHP 5+)
906 ;   extension folders as well as the separate PECL DLL download (PHP 5+).
907 ;   Be sure to appropriately set the extension_dir directive.
908 ;
909 ;extension=ba2
910 ;extension=curl
911 ;extension=ffi
912 ;extension=ftp
913 ;extension=fileinfo
914 ;extension=gd2
915 ;extension=gettext
916 ;extension=gmp
917 ;extension=imap
918 ;extension=imap
919 ;extension=interbase
920 ;extension=ldap
921 ;extension=mbstring
922 ;extension=exif      ; Must be after mbstring as it depends on it
923 ;extension=mysqli
924 ;extension=oci8_12c ; Use with Oracle Database 12c Instant Client
925 ;extension=openssl
926 ;extension=pdo_firebird
927 ;extension=pdo_mysql
928 ;extension=pdo_oci
929 ;extension=pdo_odbc
930 ;extension=pdo_pgsql
931 ;extension=pdo_sqlite
932 ;extension=pgsql
933 ;extension=shmop
934
935 ; The MIBS data available in the PHP distribution must be installed.
936 ; See http://www.php.net/manual/en/snmp.installation.php
937 ;extension=snmp

```

Ubah

```

;extension=soap
;extension=sockets
;extension=sqlite3
;extension=tidy
;extension=xmlrpc
;extension=xml

```

Menjadi

```

extension=soap
extension=sockets
extension=sqlite3
extension=tidy
extension=xmlrpc
extension=xml

```

```

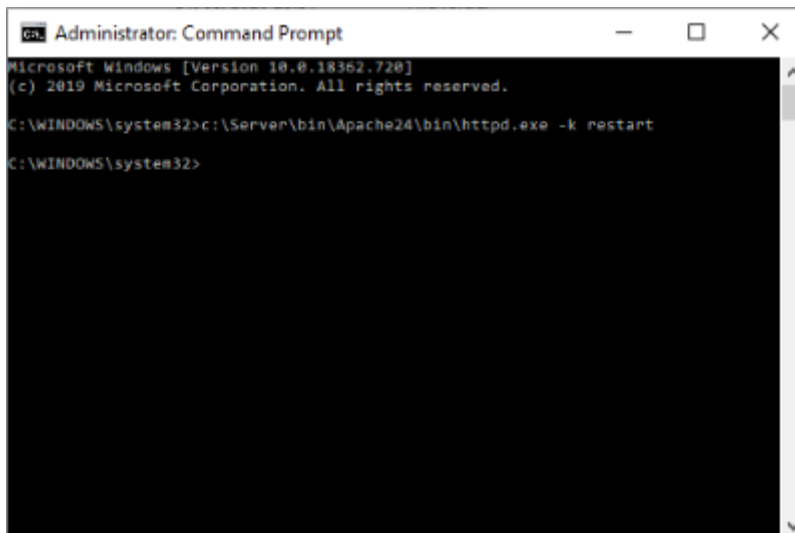
922 ;extension=exif      ; Must be after mbstring as it depends on it
923 ;extension=mysqli
924 ;extension=oci8_12c ; Use with Oracle Database 12c Instant Client
925 ;extension=openssl
926 ;extension=pdo_firebird
927 ;extension=pdo_mysql
928 ;extension=pdo_oci
929 ;extension=pdo_odbc
930 ;extension=pdo_pgsql
931 ;extension=pdo_sqlite
932 ;extension=pgsql
933 ;extension=shmop
934
935 ; The MIBS data available in the PHP distribution must be installed.
936 ; See http://www.php.net/manual/en/snmp.installation.php
937 ;extension=snmp
938
939 ;extension=soap
940 ;extension=sockets
941 ;extension=sodium
942 ;extension=sqlite3
943 ;extension=tidy
944 ;extension=xmlrpc
945 ;extension=xml
946
947 ;;;;;;;;;;;;;;;;;
948 ; Module Settings ;
949 ;;;;;;;;;;;;;;;;;
950
951 [CLI Server]
952 ; Whether the CLI web server uses ANSI color coding in its terminal output.
953 cli_server.color = On
954
955 [Date]
956 ; Defines the default timezone used by the date functions

```

Save file tersebut.

Kemudian buka cmd(run as administrator), dan ketiklah kode berikut untuk restart Apache, yaitu :

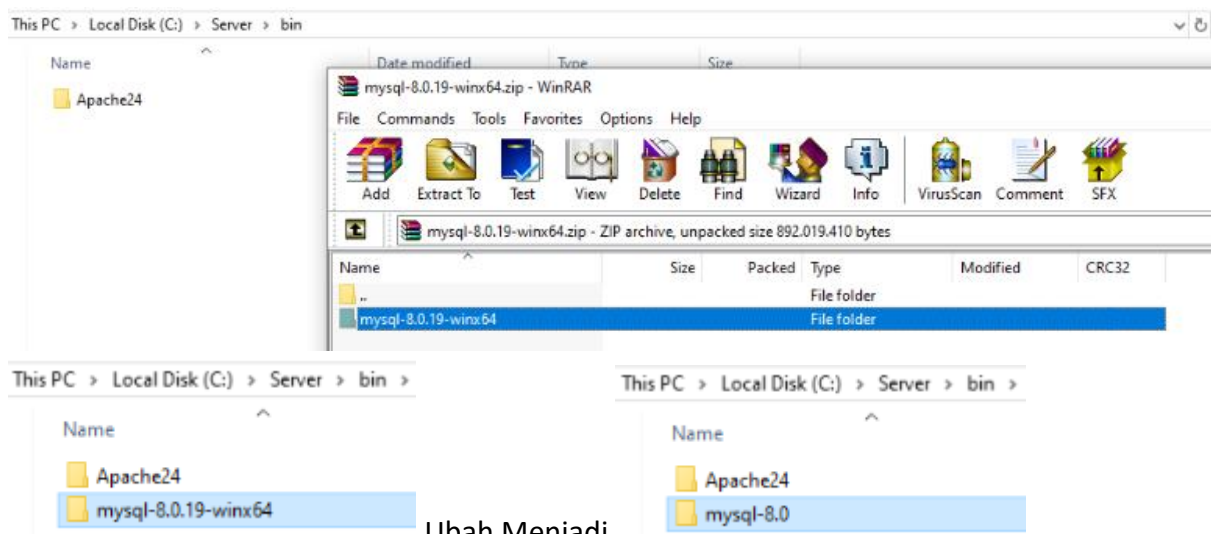
“c:\Server\bin\Apache24\bin\httpd.exe -k restart”.



Proses konfigurasi PHP telah selesai.

7. Proses Instalasi & Konfigurasi MySQL

Langkah pertama yaitu bukalah file “mysql-8.0.19-winx64.zip” kemudian ekstrak ke “c:\Server\bin\” lalu jangan lupa untuk merubah nama file yang sudah diekstrak tersebut menjadi “mysql-8.0” agar lebih pendek.

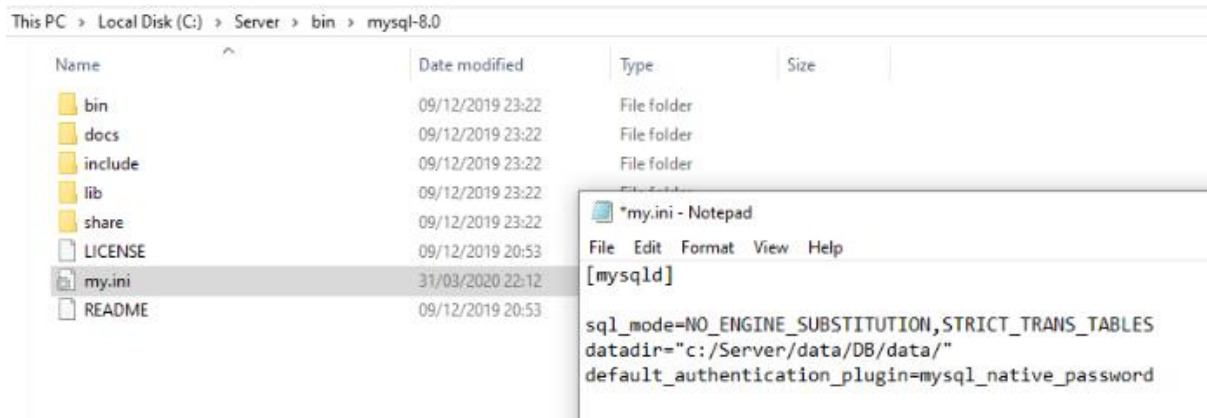


Ubah Menjadi

Selanjutnya, buatlah file bernama “my.ini” dan ketiklah kode berikut :

[mysqld]

```
sql_mode=NO_ENGINE_SUBSTITUTION,STRICT_TRANS_TABLES
datadir="c:/Server/data/DB/data/"
default_authentication_plugin=mysql_native_password
```

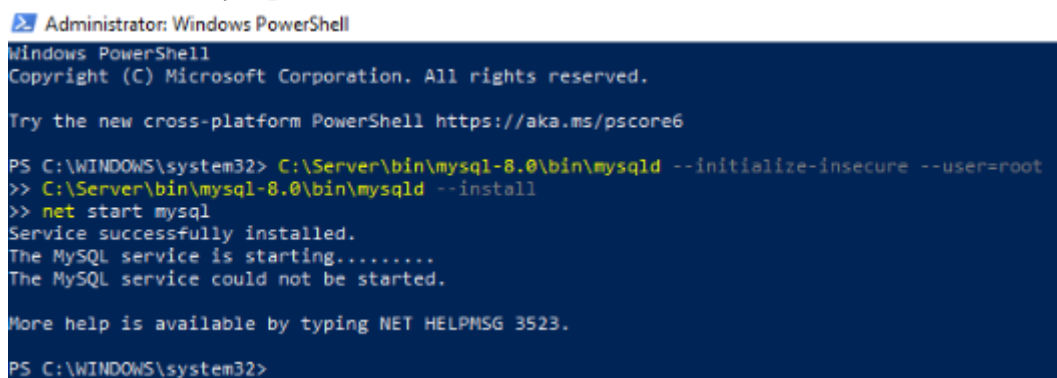



Save file tersebut.

Langkah selanjutnya adalah membuka cmd/PowerShell dan ketikkan kode berikut :

```
C:\Server\bin\mysql-8.0\bin\mysqld --initialize-insecure --
user=root
```

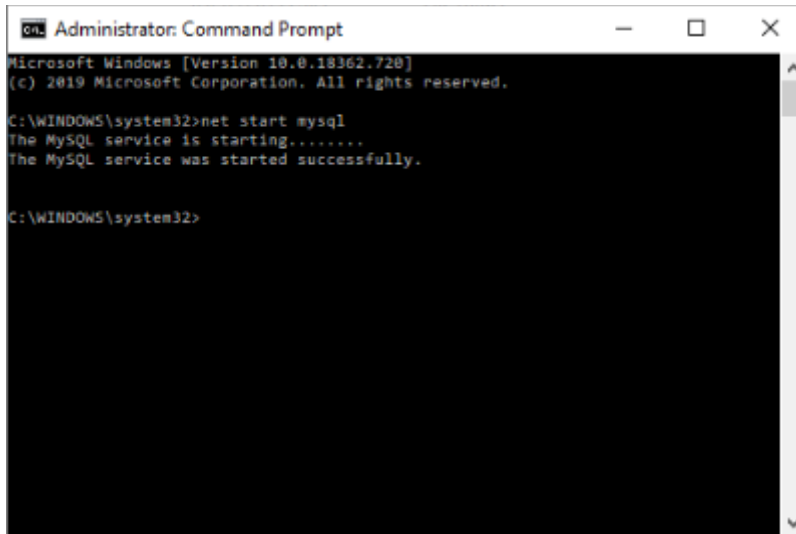
```
C:\Server\bin\mysql-8.0\bin\mysqld --install
net start mysql
```



Jika muncul tampilan seperti diatas maka MySQL telah berhasil diinstall. Kemudian dalam folder "C:\Server\data\DB\data" akan muncul beberapa file seperti berikut ini :

Name	Date modified	Type	Size
#innodb_temp	31/03/2020 22:16	File folder	
mysql	31/03/2020 22:16	File folder	
performance_schema	31/03/2020 22:16	File folder	
sys	31/03/2020 22:16	File folder	
Acer-PC.err	31/03/2020 22:16	ERR File	1 KB
Acer-PC.pid	31/03/2020 22:17	PID File	1 KB
auto.cnf	31/03/2020 22:16	CNF File	1 KB
binlog.000001	31/03/2020 22:17	000001 File	1 KB
binlog.index	31/03/2020 22:17	INDEX File	1 KB
ca.pem	31/03/2020 22:16	PEM File	2 KB
ca-key.pem	31/03/2020 22:16	PEM File	2 KB
client-cert.pem	31/03/2020 22:16	PEM File	2 KB
client-key.pem	31/03/2020 22:16	PEM File	2 KB
ib_buffer_pool	31/03/2020 22:16	File	6 KB
ib_logfile0	31/03/2020 22:17	File	49.152 KB
ib_logfile1	31/03/2020 22:15	File	49.152 KB
ibdata1	31/03/2020 22:17	File	12.288 KB
ibtmp1	31/03/2020 22:16	File	12.288 KB
mysql.libd	31/03/2020 22:17	IBD File	24.576 KB
private_key.pem	31/03/2020 22:16	PEM File	2 KB
public_key.pem	31/03/2020 22:16	PEM File	1 KB
server-cert.pem	31/03/2020 22:16	PEM File	2 KB
server-key.pem	31/03/2020 22:16	PEM File	2 KB
undo_001	31/03/2020 22:17	File	10.240 KB
undo_002	31/03/2020 22:17	File	10.240 KB

Kemudian untuk memastikan apakah MySQL telah terinstall dengan benar di komputer kita, bukalah cmd(run as administrator) ketik “net start mysql”.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>net start mysql
The MySQL service is starting.....
The MySQL service was started successfully.

C:\WINDOWS\system32>
```

Apabila muncul tampilan seperti gambar diatas maka MySQL benar-benar sudah terinstall dengan baik di komputer kita dan secara otomatis akan selalu berjalan semenjak kita menghidupkan komputer.