

Prevent or Enable Automatic Start up of Zend Server on IBM i

Issue

Sometimes a customer may prefer to not start up Zend Server automatically on the IBM i at IPL. This article tells how to prevent the automatic startup. This article also tells how to enable the automatic start up if it has previously been disabled.

Environment

Zend Server for IBM i, running on any supported version of IBM i

Resolution

Note: Where you see "ZENDPHP74", you can substitute "ZENDPHP7" or "ZENDSVR6" or "ZENDSVR" to match your version.

This is done to make the article more easy to read.

Determine if Zend Server is currently set to autostart

Whether you want to disable or enable the Zend Server autostart job, the first step should be to look at the autostart job entries in subsystem QSYSWRK to see if the entry for your version of Zend Server is already there.

From a 5250 command line, as a *SECOFR class user:

 dspbsd qsyswrk

Use option "3. Autostart job entries". There will be a lot of them in this subsystem, so you will probably need to page down to see entries for Zend Server. These are the typical* entries for Zend Server, for each version:

Job	Job Description	Library
Version 2020, 2021:		
ZS20STRSBS	ZSVRIPLD	ZENDPHP74
Version 9, 2018, 2019:		
ZS9_STRSBS	ZSVRIPLD	ZENDPHP7
Version 8.5:		
ZS8_STRSBS	ZSVRIPLD	ZENDSVR6
Version 6, 7, or 8:		
ZS_STR_SBS	ZSVRIPLD	ZENDSVR6
Version 5:		
ZS_STR_SBS	ZSVRIPLD	ZENDSVR

***The name of the entry may be different**, but the job description will always be ZSVRIPLD and the library will match your version of Zend Server. For version 9 the library is ZENDPHP7, for 6-8.5 it is ZENDSVR6, and for 5 it is ZENDSVR. So if you don't see the entry you expect, check for any entries for jobd ZSVRIPLD, and if you find any, check the library to tell what version it applies to.

 **Important Note:** If there is no entry for Zend Server, but Zend Server starts at IPL anyway, please read this.

Some customers will have at some point removed the Autostart Job Entry and instead used commands to start Zend Server. These commands may be placed, for example, in the QSTRUP program or in a scheduled job that runs at start up. If Zend Server is starting without an Autostart Job Entry, then the rest of this article will not be applicable.

Prevent automatic start up of Zend Server

Before removing the Autostart Job Entry, first follow the steps above to verify it exists.

To prevent automatic start up of Zend Server, please remove the entry using the RMVAJE command:

```
RMVAJE SBSD(QSYSWRK) JOB(ZS9_STRSBS)
```

Remember to use the actual job name that you see on the listing that matches your version of Zend Server. The above example would remove the default entry for version 9. If you are working with some other version, be sure to use the correct job name.

This entry is also responsible for starting the ZENDPHP74 (or ZENDPHP7 or ZENDSVR6 or ZENDSVR) Apache instance. So, in most cases, this should be all you need to do to prevent any start up of Zend Server and the Apache instance. However, the Apache instance may start up anyway once you remove the Autostart Job Entry. This may be because someone has added an STRTCPSVR *HTTP command (see below) to start the Apache instance to the QSTRUP program or a job scheduled to run at start up. This may also happen if the global default for HTTP Server Autostart is *YES.

If the global default for HTTP Server Autostart is *YES, you will need to set it to *NO for the ZENDPHP74 (or ZENDPHP7 or ZENDSVR6 or ZENDSVR) Apache instance.

To check for global autostart, please PROMPT (use F4 instead of Enter) the following command:

```
CHGHTTPA
```

After you look at the Autostart value, use **F12** or **F3** to exit the command **without changing anything**.

The first attribute is Autostart. If it is set to *YES, you need to specify that the ZENDPHP74 instance will not autostart. This is done in the IBM Web Administration utility.

If you have not done so, you first need to start up the ADMIN instance of Apache:

```
STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)
```

Then you can access the Web Admin at an address like this (substitute your actual IP address for the IBM i, (you do not need the <> characters)):

```
http://<your IBM i IP address>:2001/HTTPAdmin/
```

Sign in with a profile that has *ALLOBJ and *IOSYSCFG special authorities.

Under the Manage -> All Servers -> All HTTP Servers tab, click on ZENDPHP74.

This should bring up the ZENDPHP74 instance for management. In the menu to the left, find Server Properties -> General Server Configuration. Under the General Settings tab, the first Directive you should see is Autostart. It is probably set to Global, which means do whatever is set for all servers. Change it to No. Click Apply.

Note: If you no longer autostart Zend Server, it might be handy to start it with a batch program.

[Commands to start and stop Zend Server for IBM i in a batch program or from the command line](#)

Enable automatic startup of Zend Server

Before adding the Autostart Job Entry, first follow the steps above to verify it does not exist.

Note: If the Auto Start Job Entry exists, but Zend Server does not start automatically, here are some articles that can help:

[Jobs will not start in subsystem ZENDPHP7 \(or ZENDSVR6\) at start up, but can be started individually from the menu](#)

[Zend Server daemon job ZSDAEMON is not starting automatically on the IBM i when the ZENDSVR6 subsystem is started](#)

To enable automatic start up of Zend Server, please add the entry using the ADDAJE command:

```
ADDAJE SBSD(QSYSWRK) JOB(ZS9_STRSBS) JOBD(ZENDPHP74/ZSVRIPLD)
```

Remember to use the actual job name that you see on the listing that matches your version of Zend Server. The above example would remove the default entry for version 202x. If you are working with some other version, be sure to use the correct job name and library.

The autostart job entry should start the ZENDPHP74 subsystem and the ZENDPHP74 Apache instance in subsystem QHTTSPVR. Sometimes the Apache instance start up will fail, usually due to timing issues with the start up of TCP. If the ZENDPHP74 subsystem is starting up OK, but the ZENDPHP74 Apache job is not starting in subsystem QHTTSPVR, you may leave the autostart job entry in QSYSWRK, and just use these commands in your start up program to start Apache:

DLYJOB DLY(300)

STRTCPSVR SERVER(*HTTP) HTTPSVR(ZENDPHP74)

Using menu options to add and remove the entries

Starting with Zend Server 8.5, there are menu options on the maintenance menu (ZSMAINT) that will add or remove the autostart job entry. To go to the maint menu:

Version 2020, 2021, and higher: go zendphp74/zsmaint

Version 9, 2018, 2019: go zendphp7/zsmaint

Version 8.5: go zendsvr6/zsmaint

On the maint menu, you will either see two options, 20 and 21, or just one option 20:

Global Activation

20. Start Zend Server Subsystem at IPL

21. Stop Zend Server Subsystem at IPL

-- or --

Global Activation

20. Zend Server Subsystem action at IPL

If both options are there, option 20 will add the entry (if it is not already there) and option 21 will remove the entry (if it exists). If only option 20 is there, it will present a window that lets you toggle the existence of the entry using F10 and F16.

The menu options should work fine in most cases, but the additional information presented in this article may be useful to you if you have any trouble.