Zend Server for IBM i Installation Troubleshooter

Issue

When there are problems performing a new installation or a clean installation of Zend Server for IBM i, the steps in this article can help. Tips are included to help avoid common pitfalls, and instructions are provided to generate a job log for further research if the installation continues to fail.

Environment

Zend Server for IBM i version 6 or higher, running on any supported version of IBM i.

Resolution

⚠ **These instructions apply only to the full installation, not to the upgrade installers.** A full installation is done the first time Zend Server is installed, or when a clean install is performed, or when an Migration from Zend Server 5 is performed.

1. Please verify that you have downloaded the latest version of Zend Server for IBM i. If you do not have the current version, please download it from zend.com:

Download Zend Server for IBM i

Note: If the above page is not accessible, please try this temporary procedure to access the downloads.

To download Zend Server and Zend Server updates, please go to zend.com and click the My Account link at the top of most pages. If you are not already logged in, there are some options on the page. Please use the one that says "IBMi Login" under the "MyZend Account" heading. Login with your Zend login credentials. Under the Account Summary tab, in the list headed "Downloads:", find the "Zend IBMi Server" link. Click it to access the downloads page.

You can find some tips on downloading the current version here:

Download and install Zend Server for IBM i, versions 2019 and earlier

2. Please verify that you have all prerequisite licensed programs and ptf's installed (click on the Prerequisites heading to expand the list):

Installing Zend Server on IBM i

3. If a previous complete or partial installation of Zend Server is present, please remove it:

Uninstall Zend Server for IBM i

4. Please verify that ports 10090, 10091, and 10093 (**or 10080, 10081, and 10083 for versions prior to Version 9**) are available:

Verify Zend Server for IBM i has started successfully

5. Following the instructions included with the download of the installation package, FTP the installer save file to the IBM i. You may already have done this step previously for another installation attempt, so it is fine to use that save file if you did not subsequently download a newer one.

6. Please sign on to your system as QSECOFR to install Zend Server. This will ensure that you have authority to all objects during the installation, and can perform all security related commands.

7. Please make an installation job log:

Go to a 5250 session, sign off if it is active (even if already signed on as QSECOFR), and sign on as QSECOFR (having a fresh sign on will keep the job log limited to just installation related commands). Then, do these commands (**please review the notes immediately following**):

```
CHGJOB LOG(4 00 *SECLVL) LOGCLPGM(*YES)

RSTLICPGM LICPGM(7PHPZND) DEV(*SAVF) SAVF(QGPL/ZENDPHP7)

DSPJOBLOG OUTPUT(*PRINT)

DSPJOB  (Use this to get the job name and number)
```

Note: For earlier versions, the RSTLICPGM command is different. If you are installing a version prior to 9, please substitute this command:

RSTLICPGM LICPGM(6ZSVRPI) DEV(*SAVF) SAVF(QGPL/ZSVRSAVF6)

⚠ **Note: Do NOT install ZendDBi (MySQL) just now.**

You will be able to install it later, after verifying your successful installation of Zend Server.

⚠ **Note: DO ALLOW Zend Server to start.**

When you see the message that says to press enter to start Zend Server, or use F3 to exit, please do press enter. This will start up Zend Server so it is ready for the next steps.

Please go into iSeries Navigator and display output for user QSECOFR. In Navigator, go to Basic Operations -> Printer Output. If you are not logged in as QSECOFR, right click Printer Output, select Customize this View -> Include... and put QSECOFR in the Users text box (you will need authority to the QSECOFR profile).

Find the job log you just created and drag it to your desktop or some folder. Make sure the job log is for the interactive job used to run the installation, by comparing the job name and number. If you are working with Zend Support, you can zip the resulting text file, and attach the zip file to your next email response to the case.

⚠ **Note: Do not access the Zend Server User Interface yet!**

Please do the next couple of steps to verify that Zend Server is active and ready for you to access the User Interface in your browser to perform the licensing and other set up steps.

8. Before going into the Zend Server User Interface for the first time, verify that all of the expected jobs have started normally:

Verify Zend Server for IBM i has started successfully

9. Before going into the Zend Server User Interface for the first time, verify that the Zend Server Daemon and Zend Deployment Daemon have "settled". These daemons are very busy at start up, and their tasks can take some time to complete, especially on smaller partitions using partial CPUs. (We recommend running on a partition with at least one full CPU, if at all possible). From the 5250 command line:

For Zend Server 9 and higher:

```
wrkactjob sbs(zendphp7)
```

For Zend Server 6 - 8.5.x:

```
wrkactjob sbs(zendsvr6)
```

Look at the jobs named ZSDAEMON and ZSDEPLMNG. If there are more than two jobs with either of these names, use F5 once in a while to update the display, until there are just two of each. They will each have a watchdog program and a script program (zsd and zdd, respectively):

```
ZSDAEMON     QTMHHTTP    BCI       .0  PGM-watchdog     THDW
ZSDAEMON     QTMHHTTP    BCI       .0  PGM-zsd              THDW
ZSDEPLMNG    QTMHHTTP    BCI       .0  PGM-watchdog     THDW
ZSDEPLMNG    QTMHHTTP    BCI       .0  PGM-zdd              THDW
```

Once they have settled down into this calm state, you are ready to go into the Zend Server User Interface in your browser.

10. When you enter the Zend Server User Interface, please verify that you are using the latest version of Chrome, Firefox, or Internet Explorer. Older browser versions can cause problems with the client side scripting in the interface. Be especially careful not to use IE 8 or earlier, as these older versions will definitely cause the licensing process to fail.

11. To launch the Zend Server User Interface in your browser, you will need to know the ip address of the IBM i partition that you can connect to. Then you can connect at an address in this format:

http://<your IBM i IP address>:10091

Please replace '<your IBM i IP address>' with your actual IP address. For example, if your IP address is '192.168.14.123' it would look like this:

http://192.168.14.123:10091

Note: For versions prior to Zend Server 9, please use port 10081.

12. Always choose the "Production" launch profile, even on a developer server. This will optimize for a single server, which is always best for IBM i. It will also prevent Z-Ray from starting up prematurely, which can be especially critical on small partitions with partial CPU.

You can see the launch process documented here:

Launching Zend Server for IBM i