IBM i Zend Server daemons will not start in ZENDPHP74 subsystem - Server, Job Queue, Deployment, and Java Bridge daemons will not start

Issue

In the ZENDPHP74 (**for versions 9.1.x, 2018.x and 2019.x replace ZENDPHP74 with ZENDPHP7 or for versions 6 - 8.5.x replace ZENDPHP74 with ZENDSRV6)** subsystem, we expect to see jobs for the Server Daemon (ZSDAEMON), Job Queue (ZSJOBQMNG), Deployment (ZSDEPLMNG), and, if configured to start, Java Bridge (ZSJAVA_BRG). None of these jobs are present in the subsystem, and they will not start when the menu options are used to start them.

Environment

Zend Server running on any version of IBM i.

Resolution

To begin, look at the group profile for user QTMHHTTP. From a 5250 command line, with *SECOFR special authority:

```
dspusrprf qtmhhttp
```

Page down a page to see the group profile:

```
Display User Profile - Basic
User profile . . . . . . . . . . . . . . . : QTMHHTTP
User expiration interval . . . . . . . . . : *NONE
User expiration action . . . . . . . . . . : *NONE
Special authority . . . . . . . . . . . . : *NONE
Group profile . . . . . . . . . . . . . . : NOGROUP
Owner . . . . . . . . . . . . . . . . . . : *USRPRF
Group authority . . . . . . . . . . . . . : *NONE
```

In this example, the group profile is NOGROUP. This is normal and expected. If this is what your system shows, or if the group is anything shorter than 9 characters, then you do not have this problem. You do not need to proceed with the remainder of this article.

Possible issue 1 - Group profile greater than 8 characters

If your system shows a group profile that is 9 or 10 characters long, and you are running a **version of Zend Server 6 prior to 6.3,** then there is an issue with a PASE limit of 8 on user profile character lengths. You can fix this by upgrading to the current version of Zend Server for IBM i. If you cannot do it now, it is possible to fix the issue by adding a line to the zce.rc configuration file. The path to the file is:

```
/usr/local/zendsvr6/etc/zce.rc
```

Before you edit this file, **BACK IT UP**. You should take Zend Server down while editing the file, so schedule this activity for a time when your site can be down for a few minutes. Edit the file with an editor like Zend Studio that won't mess up the Linux style end of line characters (definitely do not use Notepad). In the zce.rc file, please set the PASE_USRGRP_LIMITED variable to N. Change this:

```
APACHE_VER=2.2.11
WEB_USER=qtmhhttp
WEB_GROUP=nogroup
```

To this:

```
APACHE_VER=2.2.11
export PASE_USRGRP_LIMITED=N
WEB_USER=qtmhhttp
WEB_GROUP=nogroup
```

Save the file and start Zend Server.

Possible issue 2 - Group profile *NONE

If the group profile for QTMHHTTP is set to *NONE, then it needs to be set to something, usually NOBODY. There are a couple of reasons why the installer may have been unable to set the group profile. Please follow these steps to help determine why, and to correctly set the group profile for QTMHHTTP.

Please sign on as QSECOFR or a *SECOFR class profile to do the following steps.

Step 1. Is QTMHHTTP the Primary Group for any objects?:

```
WRKOBJPGP PGP(QTMHHTTP)
```

Any such objects must be changed to not use QTMHHTTP as the Primary Group. Objects using QTMHHTTP as a Primary Group can be changed using CHGOBJPGP for library-based objects, or CHGPGP for directory-based objects.

Step 2. Is QTMHHTTP specified as the Group for any other profiles?:

```
DSPUSRPRF USRPRF(QTMHHTTP) TYPE(*GRPMBR)
```

Any such profiles must be changed to not use QTMHHTTP as the Group Profile. The profiles using QTMHHTTP for a Group Profile can be changed using the CHGUSRPRF command.

Step 3. Does QTMHHTTP have a Group ID number?:

```
DSPUSRPRF USRPRF(QTMHHTTP)
```

Page up about 5 times to find the Group ID Number. The Group ID number cannot be removed if there are any objects using QTMHHTTP as the primary group (see step 1). If there are no such objects, the Group ID is cleared in the next step.

Step 4. Make any changes required so that there are no objects using QTMHHTTP as a group (Step 1) and no Profiles using QTMHHTTP as a group (Step 2). Then add NOGROUP as the group profile for QTMHHTTP:

```
CHGUSRPRF USRPRF(QTMHHTTP) PASSWORD() GRPPRF(NOGROUP) GID(*NONE)
```

Stop Zend Server and then start it for the change to take effect.