

SYSPRO 8

Scalability Statement

Technical Guide

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SYSPRO Help and Reference

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SYSPRO 8 Scalability

There are many sites with many hundreds of concurrent users running SYSPRO 8 successfully in a client-server environment.

However, some of these sites have reported client connectivity issues after running for several days or weeks.

This guide introduces this problem, the solution provided, and answers some common questions relating to this topic.

SYSPRO 8 SCALABILITY PROBLEM

Several of our larger SYSPRO 8 sites have reported that clients are unable to connect after the application server has been running for several days or weeks without a server reboot.

On some sites this occurs in as little as 6 to 7 days, whilst for others it can take up to 4 or 5 weeks. Other sites do not seem to have this problem at all.

Once the problem occurs, it appears that the only recourse is to reboot the Application server.

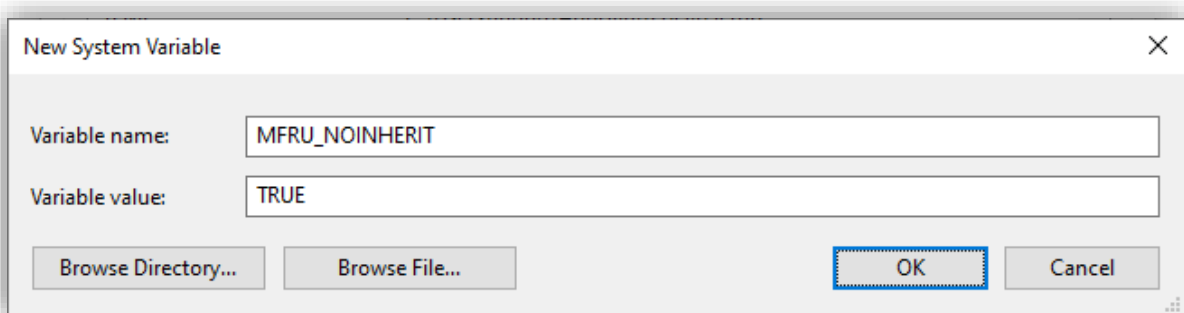
This is clearly not an ideal situation due to the disruption to the business when an unplanned server reboot is required.

Several sites prevent this potentially unwanted reboot during the day, by deliberately rebooting their Application server at a suitable off-peak time each night. This avoids the possibility of requiring an unplanned reboot during the business day.

SCALABILITY SOLUTION – SYSPRO 8 2021 R2 AND PRIOR VERSIONS

After considerable assistance from some of the sites reporting the problem, we're pleased to announce that we have a solution to the problem.

The solution is to set an operating system environment variable as shown below:





Alternatively:

```
SET MFRU_NOINHERIT=TRUE
```

This environment variable should be set on the SYSPRO Application server and any Terminal Servers hosting SYSPRO clients.

Once the variable has been set, you should reboot the Application server and any Terminal Servers, start the SYSPRO 8 services, and use SYSPRO 8 as normal. You should no longer have to reboot your Application server once a day.

SCALABILITY SOLUTION – SYSPRO 8 2022 ONWARDS

Our development team have built this system environment variable into the **SYSPRO 8 2022** install.

Therefore, once you update to the 2022 version, you will automatically have this solution built in.

SYSPRO 8 Scalability FAQs

We have included some answers to common questions related to this issue.

WHICH VERSION OF SYSPRO 8 DO I NEED FOR THIS CORRECTION?

The good news is that the environment variable affects the underlying run time system that is common across all SYSPRO 8 versions.

Therefore, the correction is SYSPRO 8 version independent, and there is no requirement to install a specific SYSPRO 8 version or hotfix for this environment variable to take effect.

CAN YOU EXPLAIN A LITTLE MORE ABOUT THE PROBLEM?

Each time you start a SYSPRO executable, the run time system adds the process to an internal list. This list has a limited number of entries.

When someone exits from SYSPRO gracefully – they logout from the menu as expected – the process is removed from the internal list, freeing up a space for another process.

However, if a SYSPRO process is killed, for example via a tool such as the Task Manager, or you use one of the 'Logout' hyperlinks in the SYSPRO Users program, the SYSPRO process is **not** removed from the internal list – thus an entry has been 'consumed'.

The internal list is limited to 1023 server-side processes and 1364 client-side processes due to the way that SYSPRO is packaged.

The server-side process limit affects the Application server and the client-side process limit will affect each Terminal Server being used by SYSPRO clients.

Once one of these limits has been reached, SYSPRO clients are unable to connect. Other unexpected behavior could also occur.

WHY DO SOME SITES NOT SEEM TO HAVE THIS PROBLEM?

If at any one time everyone has logged out of SYSPRO and there are no SYSPRO processes of any type running, the internal list will be reset.

This may explain why some sites do not report this problem.

It should be noted that some services (or failed processes) may be running without being visible in a tool such as the Task Manager. Making it difficult to see this situation.



IS THERE ANY RISK WHEN SETTING THE ENVIRONMENT VARIABLE?

We have performed extensive testing in SYSPRO 8 to ensure that there is no unexpected behavior by setting the environment variable.

We also have assurances regarding the run time environment that this variable will only affect this issue, and not have any side effects.

In our opinion, the only risk is that if third-party applications (not related to SYSPRO) were to use the same run time system as SYSPRO and the change in behavior had a negative effect on the third-party application. Due to the very specific nature of the change, we believe this is very unlikely.

The same as any upgrades or fixes applied to our software or the environment under which it runs, it is a good idea to apply the change on a test environment and verify it has the desired effect, before making it mainstream.



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