Windchill Logs and Temporary Files

There are a number of log and temporary files created by Windchill and its related processes. In most cases, what you do with them is left to you as PTC provides no scripts to move or delete them.

Log Files

Log files are created by Tomcat, Apache and Windchill as the system runs. These files can get huge if you do not have a method of starting new files every so often. The Tomcat and Apache log files will continue to grow indefinitely and even a system restart will write to the same log files. There may be some property settings to create new files on a system restart, but I am not aware of any. The Windchill log files now have dates appended to the file name OOTB and these files are created new when you restart Windchill.

Temporary files

The publishing routine generates temporary files on your Windchill server and on the publishing machine. These files can be purged on a routine basis. The Publishing Monitor list of files can also be purged on a scheduled basis by Windchill.

Database dump files

You should do a daily dump of your database as a backup and have your vaults backed up at the same time. These are the files you will need if you have a catastrophic failure. Both Oracle/SQL Server database dumps as well as the Windchill Directory Server dump are important.

Clean up of files

I use scheduled jobs that run every night for the database dumps and the file cleanup. Since I am not in a 24/7 environment, I have some leeway in when and how I do my procedures. These are what we have setup for us and you may need to modify them for your conditions. Also, there are numerous ways to get the same results.

On my Oracle server, I have scheduled jobs that run during a window of time that I have designated for system downtime. I first run a batch job that stops the Windchill, Apache and Tomcat services on the Windchill server. While Windchill is down, I run a task to stop the net services that are running the Oracle processes. Since we have had some problems with getting complete dumps, I started doing a server reboot next. After the system is back up, I run my start net services batch job, just as a fallback incase the reboot did not run. This ensures that the Oracle services are running for the dump task. My Oracle dump uses the Oracle Export (exp) command. I may change to the Export Data Pump (expdp)

command when I get to Windchill 10, but I have had also heard of some glitches with expdp. For Windchill 9.1, I am on Oracle 10g and moving to Oracle 11gR2 with Windchill 10. I manually delete older Dump and dump log files once or twice a week as they are large and only the last is of any value, unless you have a reason to restore your Windchill database to an older point. As a reference, my Oracle dump file is 13GB a night. My batch job that does the dump renames the previous dump file to today's date before creating the new file. If you are keeping the files, it may be better to rename after the dump is done so it has the current date instead of today's date on a file dated yesterday. You could then move the files to a sub folder or another machine for archives.

Windchill log files are mostly named with a date so that is easy. Part of my Windchill stop task is to rename the Apache error.log and access.log files while Apache is shutdown. I also rename the Tomcat tomcat9-stdout.log. Other Tomcat logs are dated like Windchill logs. These 3 files will grow unless renamed so a new file can be started. I do not use any batch files to move these logs, I do it manually every few days to a Log Archive folder. I know the access.log file is used by PTC if they audit you to see if you are complying with your licenses.

You can also create a script to move the files to a subfolder automatically and I may do that when I get Windchill 10 up and running. As for the file rename, it is done using windows scripting that extracts the system date and time and then uses those variables in the rename command.

I am sure that others can provide more information on log files and backup procedures that are useful in a Windchill environment. Just relying on IT to do disk backups is not enough, except for your vaults. You need the database dump files to rebuild a system if you ever need to. IT has scheduled there disk backups to take place after my Oracle dump has completed, so they get my latest dump files.