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Optimizing Job Scheduler Automation in Q-LawE & Q-Law

Presented by:

KURT SUND
Q-LAWE PRODUCT OWNER







Job Scheduler

- Q-LawE Job Scheduler is the most powerful tool in your arsenal
- Some clients have many hundreds of jobs running simultaneously on their Job Scheduler systems
 - For each job, a process that would normally require a human to click buttons and monitor the job, Automated Job Scheduler:
 - Runs unattended
 - Sends an email when the job is completed with job status results
 - Records a log file showing its activity
 - The job that is running on any Job Scheduler PC shows up in the in/out log and who is online logs for a real time view of what jobs are running
 - Setting up Job Scheduler user accounts to allow multi thread processing on a single computer
 - Example: Your firm needs 3 Job Schedulers to handle the current firm volume. Buy 3 user licenses, then follow Job Scheduler guidance to set up the 3 users to allow concurrent use of one PC. Now the single PC can process 3 jobs at a time.



Should I Use Job scheduler?

CLIENT A

- Has more than 200 reports that run daily or weekly, emailing the reports directly to the people that need them.
- Rather than a person having to manually run these reports each week, easily saving the firm 50 hours each week.

CLIENT B

- Uses Job Scheduler to check for new vendor data files for all e-filing of new suits.
- Job Scheduler runs the Secure FTP set to check the vendor website each day for new result files.
 - If they are found, they are downloaded to the vendor import **todo** folder.
- Then the vendor import job checks to see if new files were placed in the to folder, and if so, the job processes the import and sends an email saying the job was done.
- More than 7 vendor import jobs are run multiple times a day to ensure timely processing, saving **40 hours each week**.
- Client A and B, in addition to above savings, are making such effective use of Job Scheduler that 10-25 full time jobs are saved!
- A full-time tech position likely costs the firm about \$40k a year or \$3,333 a month. Job Scheduler costs one user license of \$99 a month, this math is easy!



Optimize Job Scheduler

- SQL performance and Application performance
 - New claims import is most effective when run early in the day (Ediauto2 setup) for major DTP and QVX (vExchange) imports
 - > Be on the lookout for an upcoming MMS on **New Claims Import in Job Scheduler**!
 - Payment posting batches can be done on Job Scheduler throughout the day
 - Cost requests and cost posting can be done on Job Scheduler throughout the day
- How to determine expensive jobs that impact performance
 - The number of seconds it takes to run a job is important indicator. Jobs that take longer to run, are better run during off-production hours.
- Job Scheduler must be monitored
 - Error emails can be sent to staff when errors do occur.
 - It is wise to QA a Job Scheduler process after it has been started.
 - > Randomly QA 5 jobs each month, confirm the view Log is showing errors, review if the errors were resolved.
 - Use the log files created in .\logs folder for any jobs that run. Read the log files, if in-job errors occur, which does NOT trigger email error, but only shows in .\logs\log files (Like document package jobs).



Optimize Job Scheduler

- Defining production times vs off production
 - You hopefully have a SQL backup and a Q-Law file server backup running at night
 - Once it is complete, let's assume by 2am you can start Job Scheduler jobs
 - Goal will be to have Performance degradation jobs during production hours complete by start of prime production hours (may be 8 am in your office)
 - Prime Job Scheduler hours would be from 2am to 8am each morning
 - If you have lots of jobs, perhaps you need more than one Job Scheduler PC



Step by Step Review

- Run the View Job Log and include at least the last 31 days.
 - Export to XLS file, sort by Runsec in descending order will show you longest running jobs
 - The SchedTime and Runsec tell you how long a job takes. Review Endtime does it go into productions hours? If yes, maybe job need to start earlier, or you need more Job Scheduler user accounts or more PC's running Job Scheduler.

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4048 CI	narles' Genera	Job for Testing 15	SUCCESS	Memo	06/25/2024	0952	09:52:02	09:52:18	15	VT-VDI-P0010	250	
4048 CI	narles' General	Job for Testing 15	SUCCESS	Memo	06/25/2024	0953	10:23:49	10:24:04	15	VT-VDI-P0010	255	
4048 CI	narles' Genera	Job for Testing 15	SUCCESS	Memo	06/25/2024	1024	10:24:08	10:24:24	16	VT-VDI-P0010	257	
4048 CI	narles' General	Job for Testing 15	SUCCESS	Memo	06/25/2024	1025	10:25:07	10:25:22	15	VT-VDI-P0010	263	
4048 CI	narles' General	Job for Testing 15	SUCCESS	Memo	06/25/2024	1026	10:26:07	10:26:23	15	VT-VDI-P0010	268	
4048 CI	narles' Genera	Job for Testing 15	SUCCESS	Memo	06/25/2024	1027	10:27:07	10:27:23	16	VT-VDI-P0010	273	
4049 CI	narles' Genera	Job for Testing 30	ERROR	Memo	06/20/2024	1415		14:30:19	0	VT-VDI-P0010	200	
4049 CI	narles' Genera	Job for Testing 30	SUCCESS	Memo	06/20/2024	1415	14:36:09	14:36:39	30	VT-VDI-P0010	205	
4049 CI	narles' Genera	Job for Testing 30	SUCCESS	Memo	06/20/2024	1437	14:38:21	14:38:52	30	VT-VDI-P0010	210	



How Do You Get Started

- Assign a person who will have the daily task of Job Scheduler review
- Daily review
 - Review the list of all jobs export to XLS check for status = ERROR
 - Research error issues using job specific logs in .\logs folder
 - Any users complaining about performance
 - What Job Scheduler jobs are running during the time they complain about. Is the job running more records than average and may not be repeated? Does the job start time need to change?
 - Daily review of job scheduler logs
- Monthly review
 - Pick 10 longest running jobs which run into production hours
 - Can they be rescheduled to different time, or are more Job Scheduler PCs needed?
 - Random audit of 5 jobs and top 10 jobs confirm if all jobs in preceding month ran without errors, if errors are present, is there a system issue?



Job Type Performance Impact

- Job types
 - Reports and query reports Minimal performance impact
 - New claims imports High performance impact
 - Vendor imports Medium performance impact
 - Vendor exports Minimal performance impact
 - Document imports Medium performance impact
 - DTP imports High performance impact
 - DTP Exports Minimal performance impact
 - Payment posting High performance impact
 - Cost posting – High performance impact
 - Special jobs
 - Maintenance jobs
 - Change log truncation High performance impact
 - Log file truncation High performance impact
 - Purge accounts High performance impact

Any job that inserts new records or updates lots of fields or triggers many DDAS rules are expensive and have high performance impact.



















