

Schedules



2024-04-16



Contents

1	Intro	duction	3
2	Sche	dule Types	3
3		olate Schedules	
4		nUp Schedules	
5		ainJob Schedule	
6	Insta	nce Schedules	6
	5.1	Bulk Edit	6
7	Sche	dule Input	7
	7.1	Window (Start-End)	7
	7.2	Reschedule Job	7



1 Introduction

This document globally describes the Schedules in QGrip. For a detailed description of the jobs and their option we refer to the job/queue specific documentation.

Constant and a constant of	I CONTRACTOR AND		The second se	
Category \	Domain	Object	Message	WarningAdded
NotActivated		CleanUp-Schedule	Not Activated	2020-12-03 11:25

QGrip will issue Warnings if schedules have not yet been active as it is important that the jobs do run on a regular basis.

2 Schedule Types



There are four different Schedule types and they can all be found in the same window in QGrip.

3 Template Schedules



The Template Schedules are defined for 6 Job Types and need to be configured per Environment / Domain combination.



Template	Instance		
Production on AD JobSchedules Vindow 23:00 - 06:00 - Repeat Every 24 + Hours BackupShare Regular-All Full Every 7 + Days Backup Options Verify V Compress Checksum	Copy UMSQL1201\PRD on AD JobSchedules U DBBackup Window 23.00 06.00 Repeat Every 24 Hours BackupShare Regular-All Full Every 7 Days NextRun After 2021-01-14 23.00 Repeat Verify Compress Checksum		

The Template Schedule is supposed to make it easier when you need to add schedules for a new Instance. The template is copied, all you need to do is active it by checking the Job Type check box.

The Template is copied to the Instance schedule and not inherited so changing the Template will <u>not</u> affect the Instance Schedule.

The Template is defined per Environment/Domain. If a new Domain is added to QGrip, the last changed template will be copied for the new domain. It will save you time if you first complete all Template Schedules for the first Domain and then add additional domains.

4 CleanUp Schedules

CleanUp of QGrip

- CheckDBOutput
- HistoryTables

QGrip saves the output from the CheckDB job and history records of all other jobs in the database. To prevent that the database grows too much and performance degenerates, the CleanUp jobs should run regularly.

CheckDBO	utput	✓ FistoryTables		
Window	03:00 ÷ 06:00 ÷	Window	05:00 18:00	
Repeat Every	24 + Hours	Repeat Every	12 ± Hours	
NextRun After	2021-01-15 03:00 -	NextRun After	2021-01-14 17:00 -	

Both jobs use the CleanUp definition as input to determine what can be deleted. The CleanUp definition is added to QGrip during the Initial configuration.



- 5 DomainJob Schedule
- DeleteCheck-BackupFiles
- Check-BackupShares

Get-ADGroupMembers

The DomainJob schedules need to be defined for each domain.

omainJobScheo	fules		
DeleteChec Window Repeat Every NextRun After	k-BackupFiles 03.00 ↔ 04:00 ↔ 24 ↔ Hours 2021-01-15 03:00 ↓	 ✓ Check-Back Window Repeat Every NextRun After 	kupShares 05:00 24 Hours 2021-01-15 05:00
Get-ADGrou Window Repeat Every NextRun After	pMembers 05:00 ☆ 06:00 ☆ 24 ☆ Hours 2021-01-15 05:00 ◆	1	

DeleteCheck-BackupFiles

Deletes backup files on the backup shares using the clean-up definition. It also checks that the files that are registered in the QGrip databases really exists on the backup shares.

Check-BackupShares

Checks that the files on the backup shares also are registered in the QGrip database.

Get-ADGroupMembers

Collect group members from the Active Directory for logins on the Instances of type AD-group. The information is added to QGrip where you can see the members of the groups and exactly who has access to SQL Server on AD-user level.



- **ØGRIP**
 - 6 Instance Schedules
 - DBBackup (Full, Diff, Full_CopyOnly)
 - LogBackup
 - CheckDB
 - Optimise (Index, Stats)
 - Discover
 - SystemUsage

The Instance Schedules are initially copied from the Template Schedules but can be adjusted per Instance. An Instance schedule can only be activated if the Template Schedule is also activated, otherwise it will not be visible.

6.1 Bulk Edit

Schedules	Che	eckD8							
Template-Schedules									
BomainJob-Schedules Instance-Schedules		InUse	Environment	Domain	Instance	JobType	WindowStart	WindowEnd	
B-Q JobTypes		Г	Acceptance	AD	VMSQL1201\ACC	CheckDB	21:00:00	22:00:00	
E P DBBackup		P	Production	AD	VMSQL1201/PRD	CheckDB	22:00:00	23:00:00	
CheckD6			Production	AB	VMSQL1601UNST01	CheckDB	22:00:00	23-00.00	
E Uptimise		1	Production	AÐ	VMSQL1602/INST02	ChackDB	22:00:00	23.00.00	
Discover	Þ.		Production	AD)	VMSQL1603//NST03	CheckDB	22:00:00	23:00:00	
B SystemUsage B kind the system with the system withe system with the system with the system with the system with th	•					1			

Use BulkEdit to change multiple Instance-Schedules of the same JobType with the same value(s).

ulkEdit : CheckDB	BulkEdit : Discover		
I Add/Remove Job Add if not exists ▼ Window Start 15:43 ⁻¹	Add/Remove Job Add if not exists Window Start 05:00		
Vindow End 23:30 +	₩indow End 18.00 ÷		
Repeat Every 3 Days	Repeat Every 12 Hours		
Timeout Options 🔽 Lock Timeout 10-	Disk Option Get Disk Drives (Size/Free)		
Next Run After 2021-01-14 15:43 +	Next Run After 2020-12-13 10:43 -		

Check the value that needs to be changed and enter the new value. The BulkEdit window differs per Job Type.

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SCHEDULES

7 Schedule Input

Window Start	Window	03:00 🛨 04:00	÷					
Window End	Repeat Every	24 ÷ Hours						
Repeat Every	NextRun After	2020-12-04 03:00	•					
NextRun After (not in Template)								

All Schedules have a Window Start-End and a Repeat Every value and a Next Run time stamp (except Template Schedules).

7.1 Window (Start-End)

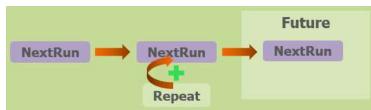


The purpose of the Window (Start-End) is for rescheduling the job and limit the runtime of the CheckDB and Optimise jobs.

CheckDB & Optimise

If one of these jobs is running on an Instance, the window will be checked before commencing with a new database. If no longer within the window, the job will be paused until next day.

7.2 Reschedule Job

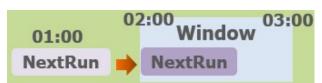


When a job has finished it needs to be rescheduled. QGrip will add the repeat every parameter to the "last" NextRun parameter until it is in the future.



1. If the calculated NextRun is within the window, it will be used. As long as you are not playing around with the NextRun after date, this will be the case.





2. If the calculated NextRun is before the window, it will be moved to the beginning of the window.



3. If the calculated NextRun is after the window, it will be moved to the beginning of the subsequent window. In this situation, one window will be skipped.