Manual SUSDB-Maintenance

The poor health of the SUSDB can often be having too many superseded, declined, and obsolete updates.

**use** SUSDB;  
  
**DECLARE** @numberOfMatch INT  
**DECLARE** @tmpTable **TABLE** (  
    **name** VARCHAR(25)  
)  
**INSERT** **INTO** @tmpTable  
EXEC spGetObsoleteUpdatesToCleanup  
**SELECT** @numberOfMatch = @@ROWCOUNT  
**select**  
(**Select** **count** (\*) **from** vwMinimalUpdate ) 'Total Updates',  
(**Select** **count** (\*) **from** vwMinimalUpdate **where** declined=0) **as** 'Live Updates',  
(**Select** **count** (\*) **from** vwMinimalUpdate **where** IsSuperseded =1) **as** 'Superseded',  
(**Select** **count** (\*) **from** vwMinimalUpdate **where** IsSuperseded =1 **and** declined=0) **as** 'Superseded but not declined',  
(**Select** **count** (\*) **from** vwMinimalUpdate **where** declined=1) **as** 'Declined',  
(**Select** **count** (\*) **from** vwMinimalUpdate **where** IsSuperseded =1 **and** declined=1) 'Superseded & Declined',  
(**select** **Count**(\*)  **From** @tmpTable ) 'Obsolete Updates Needed to be cleaned'

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# Cleanup Steps

Run the steps below on each WSUS in the hierarchy. When performing a cleanup and removing items from WSUS servers, you should start at the bottom of the hierarchy.

Steps 7-11 you may need to run multiple times due to the substantial number of declined updates. After each run, execute the Count of Declined Updates query to verify the number is going down and to monitor progress. Step 7 may end in error each time you run it, hence the reason for steps 7-11 and running it again. This is normal. Some of these steps, especially [step](https://usg01.safelinks.protection.office365.us/?url=https%3A%2F%2Furldefense.us%2Fv3%2F__https%3A%2Fsupportability.visualstudio.com%2F5e770886-4c96-46b2-96a9-3d634319cd13%2F_workitems%2Fedit%2F9__%3B!!Az_Xe1LHMyBq19w!KA-VxkpsQ--GvfMa6Aq34buN7TcgRqsyJ01F10P898aagfvWdW303J3ffDR8Vpq4kcMRV99cVHA-lv5ZzF7Imee2AnTN4VSI%24&data=05%7C01%7Cwayne.a.walbrun.ctr%40us.navy.mil%7Cf636391b553146d947aa08dbbbc2272a%7Ce3333e00c8774b87b6ad45e942de1750%7C0%7C0%7C638310214849656969%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=DUOmoTcUti%2B112Dcu310tcICjFF4W4rbeBgkK9F%2BD2o%3D&reserved=0) 8, which could take several hours to complete.

This is a long and repetitive, but I have seen it resolve client issues with scanning and synching.

## Step 1. Run spDeleteUpdate sp enhancement.

<https://learn.microsoft.com/en-us/troubleshoot/mem/configmgr/update-management/spdeleteupdate-slow-performance>

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## Step 2. Shrink Files

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## Step 3. Shrink Database (may take time depending on the avail. free space)

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## Step 4. Reindex SUSDB

EXEC sp\_MSforeachtable @command1="**SET** QUOTED\_IDENTIFIER **ON**;**ALTER** **INDEX** **ALL** **ON** ? **REBUILD**;"

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## Step 5. Update statistics.

Exec sp\_msforeachtable "**UPDATE** **STATISTICS** ? **WITH** FULLSCAN, **COLUMNS**"

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## Step 6. Cleanup of sync history.

If there is a large number of syncs, it can crash the WSUS console. (I prefer to skip when possible)

**USE** SUSDB   
**GO**   
**DELETE** **FROM** tbEventInstance **WHERE** EventNamespaceID = '2' **AND** EVENTID **IN** ('381', '382', '384', '386', '387', '389')

## Step 7. Cleanup of all superseded updates.

**DECLARE** @thresholdDays INT = 90   -- Specify the number of days between today and the release date for which the superseded updates must not be declined. This should match configuration of supersedence rules in SUP component properties, if ConfigMgr is being used with WSUS.  
**DECLARE** @testRun BIT = 0          -- Set this to 1 to test without declining anything.   
-- There shouldn't be any need to modify anything after this line.  
**DECLARE** @uid UNIQUEIDENTIFIER  
**DECLARE** @title **NVARCHAR**(500)  
**DECLARE** @date DATETIME  
**DECLARE** @userName **NVARCHAR**(100) = **SYSTEM\_USER**   
**DECLARE** @**count** INT = 0   
**DECLARE** DU **CURSOR** **FOR**  
       **SELECT** MU.UpdateID, U.DefaultTitle, U.CreationDate **FROM** vwMinimalUpdate MU   
       **JOIN** PUBLIC\_VIEWS.vUpdate U **ON** MU.UpdateID = U.UpdateId  
       **WHERE** MU.IsSuperseded = 1 **AND** MU.Declined = 0 **AND** MU.IsLatestRevision = 1  
       **AND** MU.CreationDate < **DATEADD**(dd,-@thresholdDays,**GETDATE**())  
       **ORDER** **BY** MU.CreationDate   
PRINT 'Declining superseded updates older than ' + **CONVERT**(**NVARCHAR**(5), @thresholdDays) + ' days.' + CHAR(10)   
**OPEN** DU  
**FETCH** **NEXT** **FROM** DU **INTO** @uid, @title, @date  
**WHILE** (@@FETCH\_STATUS > - 1)  
**BEGIN**    
       **SET** @**count** = @**count** + 1  
       PRINT 'Declining update ' + **CONVERT**(**NVARCHAR**(50), @uid) + ' (Creation Date ' + **CONVERT**(**NVARCHAR**(50), @date) + ') - ' + @title + ' ...'  
       **IF** @testRun = 0  
              EXEC spDeclineUpdate @updateID = @uid, @adminName = @userName, @failIfReplica = 1   
       **FETCH** **NEXT** **FROM** DU **INTO** @uid, @title, @date  
**END**   
**CLOSE** DU  
**DEALLOCATE** DU   
PRINT CHAR(10) + 'Attempted to decline ' + **CONVERT**(**NVARCHAR**(10), @**count**) + ' updates.'

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## Step 8. Cleanup of all obsolete updates.

**DECLARE** @var1 INT  
**DECLARE** @msg **nvarchar**(100)  
**CREATE** **TABLE** #results (Col1 INT)  
        **INSERT** **INTO** #results(Col1) EXEC spGetObsoleteUpdatesToCleanup  
**DECLARE** WC **Cursor**  
        **FOR**  
        **SELECT** Col1 **FROM** #results  
**OPEN** WC  
        **FETCH** **NEXT** **FROM** WC  
        **INTO** @var1  
        **WHILE** (@@FETCH\_STATUS > -1)  
        **BEGIN** **SET** @msg = 'Deleting' + **CONVERT**(varchar(10), @var1)  
        RAISERROR(@msg,0,1) **WITH** **NOWAIT** EXEC spDeleteUpdate @localUpdateID=@var1  
        **FETCH** **NEXT** **FROM** WC **INTO** @var1 **END**          
**CLOSE** WC  
        **DEALLOCATE** WC  
          
        **DROP** **TABLE** #results

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\*Steps 9-10 are to be performed on all WSUS servers attached to the Primary site starting at the bottom and up.

## Step 9. Performs standard WSUS cleanup steps.

Save the below as a Cleanup.PS1 then you can later setup to run on a regular basis via a Scheduled Task

[reflection.assembly]::LoadWithPartialName("Microsoft.UpdateServices.Administration") | out-null  
$wsus = [Microsoft.UpdateServices.Administration.AdminProxy]::GetUpdateServer();  
$cleanupScope = new-object Microsoft.UpdateServices.Administration.CleanupScope;  
$cleanupScope.DeclineSupersededUpdates = $true  
$cleanupScope.DeclineExpiredUpdates = $true  
$cleanupScope.CleanupObsoleteUpdates = $true  
$cleanupScope.CompressUpdates = $true  
$cleanupScope.CleanupObsoleteComputers = $true  
$cleanupScope.CleanupUnneededContentFiles = $true  
$cleanupManager = $wsus.GetCleanupManager();  
$cleanupManager.PerformCleanup($cleanupScope);

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## Step 10. Cleanup declined updates.

Save the below as a Cleanup\_Declined.PS1 then you can later setup to run on a regular basis via a Scheduled Task

[reflection.assembly]::LoadWithPartialName("Microsoft.UpdateServices.Administration")  
$wsus = [Microsoft.UpdateServices.Administration.AdminProxy]::GetUpdateServer();  
$wsus.GetUpdates() | Where {$\_.IsDeclined -eq $true} | ForEach-Object {$wsus.DeleteUpdate($\_.Id.UpdateId.ToString()); Write-Host $\_.Title removed }

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## Step 11. Repeat steps 2-4.

Re-run shrink db and files, and update stats.