



# StoragePoint

## SharePoint Upgrade Using Metalogix

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# SharePoint 2010 to 2013 Upgrade

## Upgrade Overview

StoragePoint fully supports the primary 2010 to 2013 upgrade method - database attach.

For more information on the SharePoint specific details of upgrading, please see the Microsoft [website](#).

## Solution Components and Systems

Name	Description
SharePoint	Microsoft's enterprise collaboration and document management system. SharePoint will be both the source and the target of the migration efforts.
SharePoint Web Front End (WFE)	One or more web servers that host the SharePoint Web Application.
Storage	The storage system(s)\location(s) to which the BLOBs will be externalized.
StoragePoint	The RBS BLOB externalization engine.
StoragePoint Storage Adapter	The configurable adapter for connecting to the specific Storage component.

## General Terms, Concepts and Acronyms

The items described below will appear throughout this document. It's important that these items are well understood.

Name	Definition
Migration Job	The operational information for a migration including the instructions for performing the job, the configuration, and any history information for a previous run.
Migration Source	The environment from which the content that is to be migrated will originate.
Migration Target	The destination environment for the content that is to be migrated.
BLOB	Binary Large Object.
RBS	Collectively, the technologies used within SharePoint to externalize content.
Storage Endpoint	The information that describes the configuration for a particular location where content will be externalized to, including the type of system, the storage adapter used, the connection and path information and any required active endpoint monitoring requirements.
Storage Profile	The configuration for defining the SharePoint scope of what should be externalized and how (using which Storage Endpoint).

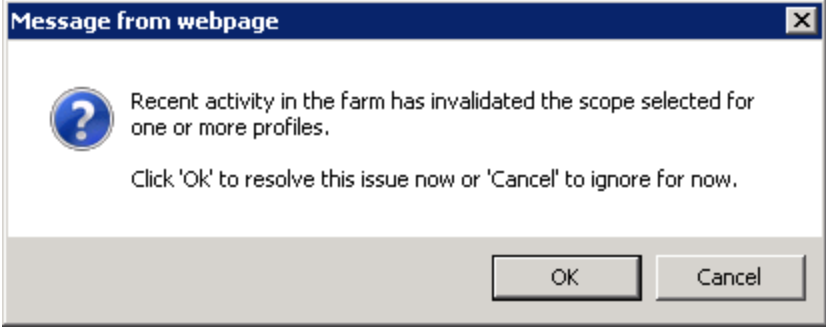
## Database Attach Method

The Database Attach method of upgrading SharePoint involves creating a separate 2013 "upgrade" farm and then attaching the content databases from the 2010 farm into the 2013 farm.

## Upgrade Steps

The following table outlines the steps involved in upgrading SharePoint 2010 with StoragePoint to SharePoint/StoragePoint 2013 using the database attach method:

#	Step	Description
1	Ensure 2013 upgrade farm is established.	The 2013 farm should be provisioned and functioning (without any upgrade content). Any non-StoragePoint 3rd party solutions/features/web parts, etc. should be installed into the farm.
2	Document and disable source StoragePoint profile jobs.	For each StoragePoint storage profile, make note of any timer jobs configured to run on a set schedule, as well as any archiving configurations. Also note the frequency of Content Migrator and Capacity Monitor on General Settings, if they apply to your configuration.  For all StoragePoint Profiles that will be migrated, disable all jobs for those profiles.
3	Backup/Restore StoragePoint database to new farm.	A backup of the StoragePoint database from the 2010 farm should be restored in the new 2013 farm. It is not recommended you share a copy of this database between the 2010 and 2013 farms.
4	Install StoragePoint for SharePoint 2013.	StoragePoint for SharePoint 2013 should be installed in the 2013 upgrade farm. When prompted for the database name and location, ensure that the database copy established in step #3 is specified. EBS is no longer supported in 2013. So all profiles needs to be upgraded to RBS before this upgrade process.  *It is imperative that all StoragePoint jobs be double-checked as disabled on the migration target prior to continuing.
5	Copy the blob store(s) for profiles that are being migrated. (OPTIONAL)	A copy of the blob stores for profiles being migrated needs to be made if the 2010 farm will remain functional after the upgrade. If the 2010 farm will retire the content databases that are being upgraded, then this step is not necessary.
5a	Update endpoint connection paths to point to blob store copy. (OPTIONAL)	The endpoints need to be edited to reflect the new blob store copy location established in step #6. This step may be skipped if step #5 was skipped.
6	Attach content database(s) from 2010 farm to 2013 farm.	The content database(s) from the 2010 farm should be attached into the 2013 farm. Please see the Microsoft documentation for more information.
7	Re-link Web Application scoped profiles. (ONLY if using Web Application scoped profiles)	When using the database attach upgrade method, the web application IDs on the 2013 farm will not match the IDs on the 2010 farm. To fix the profile links, follow these steps on the 2013 upgrade farm:  a) Go to the Storage Profiles screen in StoragePoint.  b) A popup should alert you that some of the profiles have become unlinked from their Web Application:

		 <p>c) Click OK on the popup to be taken to the Storage Profile Fixup screen.</p> <p>d) Click on the profile scope name under the Profile Scope column to manually fix the linkage. *DO NOT* click Fix Automatically as it will not work in this case.</p> <p>e) A warning will display about issues with manually fixing a profile scope - click the OK button.</p> <p>f) On the Select Web Application screen that pops up, select the Web Application on the 2013 farm that the profile should be associated with.</p>
8	Re-establish any StoragePoint timer job definitions.	<p>StoragePoint timer job schedules and settings will not be migrated to the 2013 farm automatically. These must be setup manually. Key timer jobs to check:</p> <ul style="list-style-type: none"> <li>• <i>Orphan BLOB Cleanup Job.</i> This job is usually run on a weekly or daily schedule. It must be scheduled for each profile.</li> <li>• <i>BLOB Health Analysis Job.</i> This job is usually run on a weekly or daily schedule. It must be scheduled for each profile.</li> <li>• <i>Externalize/Recall/Bulk Migrate.</i> These jobs are not normally run on a schedule but if your environment had them running on a schedule, be sure to reestablish them.</li> <li>• <i>Archiving Jobs.</i> If any archiving jobs were setup in the 2010 farm, these must be reestablished on each profile.</li> <li>• <i>Content Migrator/Endpoint Capacity Monitor.</i> These jobs are scheduled by default during the installation for 5 minute run intervals. If you wish a more or less frequent schedule, you may modify it on the General Settings screen.</li> </ul>
9	IISRESET and start/stop Timer Service	It is required that an IISRESET and stop/start of the SharePoint 2013 Timer service be done on each server in the farm after the upgrade is complete.
10	Test!	Thoroughly test each profile to ensure that it is storing and retrieving content appropriately. Contact StoragePoint support if you encounter any issues.
11	Take Source Content Offline	Once the migration checks out, take the source content offline for each migrated profile:

		<p><u>For web application-scoped profile(s):</u></p> <p>Remove Web Application(s) from Central Administration on source.</p> <p><u>For content database-scoped profile(s):</u></p> <p>Remove Content Database(s) from Central Administration on source.</p>
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## Converting from EBS to RBS

The ability to convert from EBS technology to RBS technology is built into StoragePoint. This provides a degree of “future proofing” – use EBS now and convert to RBS in the future.

The process for converting a profile from EBS to RBS varies slightly depending on the profile type with the content database profile type being the most straightforward to convert.

Please keep in mind the following when considering whether to convert a profile to RBS:

- The conversion from EBS to RBS must be done on the SharePoint 2010 farm BEFORE any upgrade steps to SharePoint 2013 are done.
- RBS requires the Enterprise Edition of SQL Server 2008 or 2008 R2. It will not work with SQL Server Standard Edition.
- EBS is fully supported on SharePoint 2010. Microsoft has announced its intention to discontinue EBS in SharePoint 2013. Within StoragePoint there is no functionality difference when using EBS as opposed to RBS.
- RBS supports only content database or Web Application scope profiles. Site collection option is not available when using RBS.
- If upgrading from MOSS/WSS 2007 to SharePoint 2010, it is recommended that you continue to use EBS on both source and target until the upgrade to 2010 has been completed. After the upgrade to 2010 has been completed, check all functionality and make sure the 2010 farm is operating properly. Then, the conversion to using RBS can be performed.


## Converting from EBS to RBS for StoragePoint Prior to 5.1.3305

This feature is only available on SharePoint 2010 for content database or web app scoped profiles. If a profile was initially configured to use EBS, there will be a link allowing for a one-time upgrade.

**NOTE:** If the version of StoragePoint is prior to 4.1, contact Metalogix to upgrade StoragePoint.

To upgrade an EBS-based content database or web application profile to RBS, follow these steps within Central Administration:

1. On the Edit Storage Profile page, click the Upgrade from EBS to RBS link.

<b>Profile Name</b> 	<b>Name</b> <input type="text" value="Inventory 2 CDB"/>	 <a href="#">Upgrade from EBS to RBS</a>
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A new window will open.

- Schedule the conversion, or leave Immediately selected. (Optional) Click Show to open the Advanced Job Settings and configure processing threads, Master/Worker setup, and completion notice information. Click Convert.

**Warning** Upgrading profile from EBS to RBS operation is irreversible!

**Central Administration**

- Application Management
- System Settings
- Monitoring
- Backup and Restore
- Security
- Upgrade and Migration
- General Application Settings
- Configuration Wizards

Recycle Bin  
All Site Content

**Upgrading Profile** Name: Inventory 2 CDB

**Conversion from EBS to RBS**

Immediately  
 Schedule

Schedule this process to run:  
  12 AM 00  
 on Server

**Advanced Job Settings (Hide)**

with  Processing Threads  
*If blank, will default to one thread per processor.*

in Job Role   
*Standalone is the default and will process all work in a single Job. Master will coordinate work across one or more worker WFE's.*

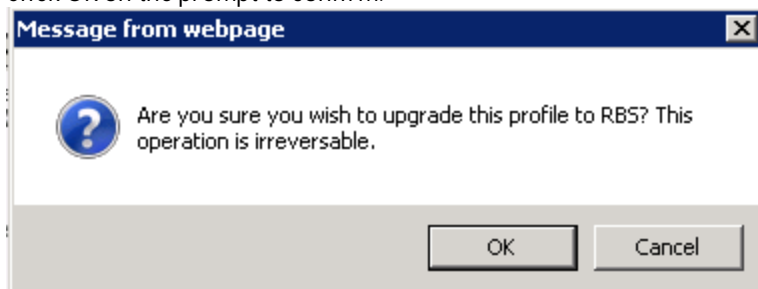
Send Completion Notice:  
 Always  Only when errors occur

To:  
 Default notification contacts

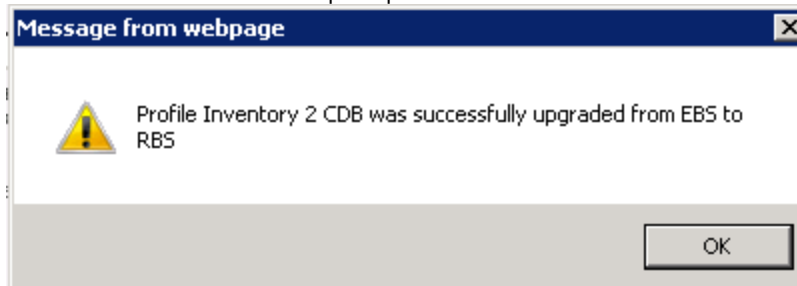
Additional Contacts  
  
*Provide a semi-colon delimited list of e-mail addresses.*

Convert Cancel

- Click OK on the prompt to confirm.

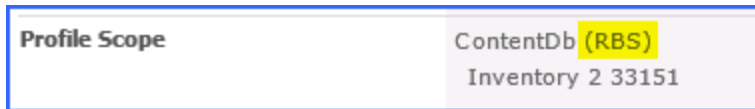


- Click OK on the confirmation prompt.



- The page is returned to the profile page. Note the change to the profile scope.





6. On the Job Summary page, there will be an entry for the EBS to RBS Conversion timer job.

EBS to RBS Conversion	ContentDb (Inventory 2 33151)	DET-QA- 2010APP1	4/18/2014 1:56 PM	Complete 100%	Clear   Summary
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### Converting from EBS to RBS for Site Collection Scoped Profiles

These steps are for StoragePoint versions prior to 5.1.3305, but at least 4.1. If the version of StoragePoint is prior to 4.1, contact Metalogix to upgrade StoragePoint.

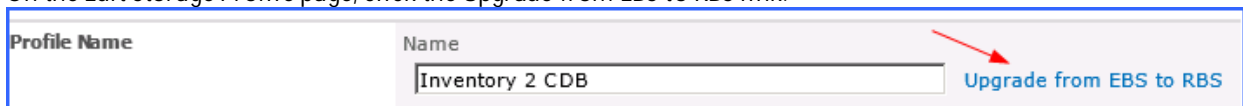
To upgrade an EBS site collection profile to RBS, follow these steps within Central Administration:

- 1) On the Storage Profiles page, click the Create New Profile link. Create a profile with a content database scope and make sure the Use Remote Blob Storage button is selected.
  - a. Add an endpoint to the profile where all site collections under the content database will write their blobs. (See the StoragePoint Installation and Administration guide for more information on creating profiles and endpoints.)
- 2) On the Storage Profiles page, click the Jobs link next to the RBS profile created in step #1.
- 3) On the Timer Jobs page, schedule or immediately run an Externalization job to convert EBS blob references in the content database to RBS.
- 4) Do not delete the EBS profiles. Change the Externalization option on the EBS profile to No and save the profile. (Note that these EBS profiles will now, effectively, be orphaned so leaving them within the interface will not have any effect on the new RBS externalization.)

### Converting from EBS to RBS for StoragePoint 5.1.3305 and Newer

This feature is only available on SharePoint 2010. If a profile was initially configured to use EBS, there will be a link allowing for a one-time upgrade.

1. On the Edit Storage Profile page, click the Upgrade from EBS to RBS link.



A new window will open.

There are a few scenarios that could be encountered, keeping in mind that site collection scoped profiles can only use EBS.

If the profile is site collection scoped:

- and there is no parent profile (Content Database or Web Application scoped), then a new profile must be created that uses RBS and covers the scope of the site collection.
- and there is an EBS parent profile, that parent profile will be converted to RBS, the site collection profile will be inactivated and hidden, and the site collection will now fall under the scope of that parent profile.
- and there is an RBS parent profile, the site collection profile will be inactivated and hidden, and the site collection will now fall under the scope of that parent profile.

If the profile is Content Database or Web Application scoped, it will be converted to RBS. Any Site Collection scoped profiles that are children to the converted profile will be inactivated and hidden. Any Content Database profiles that are children will be converted, but will not be deactivated.

All content within the scope of the profile will be converted automatically.

Converted content will not be moved to the parent or grandparent profile endpoint. That can be done with a Bulk Migration job.

Site Actions

Microsoft SharePoint 2010 Central Administration > EBS to RBS Conversion

**Warning** Upgrading this profile from EBS to RBS operation is not directly possible! Please convert the profile shown below which has the higher scope.

<b>Central Administration</b> Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application	<b>Upgrading Profile</b> Name: Colors CDB	<input type="button" value="Convert"/> <input type="button" value="Cancel"/>
	<b>Conversion Details</b>	
	<b>Upgrading Profile Scope:</b> ContentDb (colors - 39937) <b>Nested Profile Name (Conversion Operation)</b> Pink SC (Converted, deactivated and ignored) <b>Nested Profile Scope</b> SiteCollection (http://sp2010smoke2svr:39937)	

Converting a SC scoped profile with an EBS Parent profile.

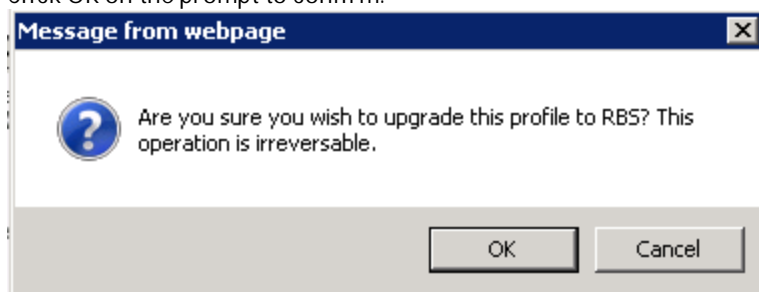
Microsoft SharePoint 2010 Central Administration > EBS to RBS Conversion

**Warning** Upgrading this profile from EBS to RBS operation is irreversible! Running the EBS to RBS conversion job will convert all BLOBs to RBS for this and all child profiles. Site collection scoped StoragePoint profiles will be deactivated and ignored afterwards.

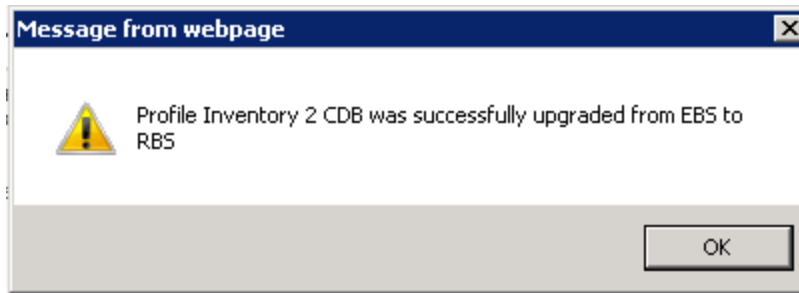
<b>Central Administration</b> Application Management System Settings Monitoring Backup and Restore Security Upgrade and Migration General Application	<b>Upgrading Profile</b> Name: colors cdb ebs	<input type="button" value="Convert"/> <input type="button" value="Cancel"/>
	<b>Conversion Details</b>	
	<b>Upgrading Profile Scope:</b> ContentDb (colors - 39937) <b>Nested Profile Name (Conversion Operation)</b> EBS PINK (Converted, deactivated and ignored) <b>Nested Profile Scope</b> SiteCollection (http://sp2010smoke2svr:39937)	

Converting a CDB scoped profile with a child SC profile.

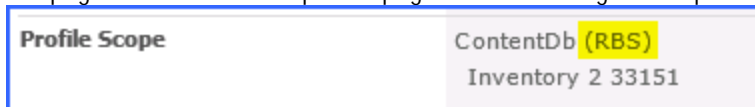
- Click Convert.
- Click OK on the prompt to confirm.



- Click OK on the confirmation prompt.



4. The page is returned to the profile page. Note the change to the profile scope.



5. On the Job Summary page, there will be an entry for the EBS to RBS Conversion timer job. This summary will show how many BLOBs were converted.

EBS to RBS Conversion	ContentDb (Inventory 2 33151)	DET-QA-2010APP1	4/18/2014 Complete 100% 1:56 PM	<a href="#">Clear</a>   <a href="#">Summary</a>
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Close

## Timer Job Summary

Timer Job Summary

### Profile Detail

Profile Name	Colors CDB										
Profile Scope	ContentDb										
Profile Id	362f5af7-ac1d-4d5a-9b99-3c6459366553										
Profile Endpoints	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>#</th> <th>Endpoint</th> <th>Write Mode</th> <th>Online</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>EP1 (FileSystem)</td> <td>Synchronous</td> <td>Yes</td> <td>None</td> </tr> </tbody> </table>	#	Endpoint	Write Mode	Online	Filter	1	EP1 (FileSystem)	Synchronous	Yes	None
#	Endpoint	Write Mode	Online	Filter							
1	EP1 (FileSystem)	Synchronous	Yes	None							

### Job Detail

Job Name	EBS to RBS Conversion
Job Role	Standalone
Server	sp2010smoke2svr
Started	6/30/2015 3:34:47 PM
Completed	6/30/2015 3:34:52 PM
Completion Status	No errors
BLOBs Converted to RBS	19 of 19
Site Collections Processed	<a href="http://sp2010smoke2svr:39937">http://sp2010smoke2svr:39937</a>

Close

## Known Issues

### Error Testing Restored Databases

When testing (executing the PowerShell command Test-ContentDatabase) a restored content database in the SharePoint 2013 farm, an error message similar to this may be received:

```
Database [wss_content_21822_EBS] has reference(s) to a missing feature: Id = [4822d9ca-c6b1-46ab-993a-89a9cfb4e4ac],  
Name = [StoragePoint], Description = [], Install Location = [StoragePoint].
```

It is because the externalization was not set to "No" before performing the content database backup on the SharePoint 2010 farm. It doesn't prevent the database from being mounted or upgraded.

### Using 2010 User Interface in SharePoint 2013

It is recommended that all site collections use the SharePoint 2013 user interface after the database attach upgrade. If the SharePoint 2010 user interface is used, some profiles may experience errors when changing externalization from 'No' to 'Yes'.