Basic downtime walkthrough:

Install the Latest Update Rollup for Exchange 2010

From <<http://technet.microsoft.com/en-us/library/ff637981.aspx>>

<http://exchangeserverpro.com/how-to-install-updates-on-exchange-server-2010-database-availability-groups/>

Down the F5 monitors to prevent client connections to OWA, ActiveSync, and Autodiscover.

Down the SMTP monitor for Zix mail flow in?  This happened automatically when we turned off the Transport service.

[Move databases](http://smtp25.blogspot.com/2012/04/move-active-database-dag-exchange-2010.html) off of server to upgrade.

Move-ActiveMailboxDatabase -Server SERVERNAME -ActivateOnServer SERVERNAME -Confirm $false

DAG and exchange servers in maintenance mode in SCOM

Set-executionpolicy unrestricted

Get-MailboxServer SERVERNAME | fl Name,DatabaseCopyAutoActivationPolicy

Set-MailboxServer SERVERNAME -DatabaseCopyAutoActivationPolicy Blocked

cd $exscripts

.\StartDagServerMaintenance.ps1 -serverName SERVERNAME

.\StopDagServerMaintenance.ps1 -serverName SERVERNAME

The script will automatically do the following tasks for you:

Calls [Suspend-MailboxDatabaseCopy](http://technet.microsoft.com/en-us/library/dd351074.aspx) on the database copies.

Pauses the node in Failover Clustering so that it cannot become the [Primary Active Manager](http://technet.microsoft.com/en-us/library/dd776123.aspx). (not necessarily the server hosting databases.  The script moves this if it is the PAM)

Suspends database activation on each mailbox database.

Sets the DatabaseCopyAutoActivationPolicy to Blocked on the server.

Moves databases and cluster group off of the designated server.

Disable ForeFront -

Stop-Service fsccontroller -force

Microsoft Forefront Server protection Controller is the master service.  Stop it and you're good.

Cd "C:\Program Files (x86)\Microsoft Forefront Protection for Exchange Server"

fscutility.exe /disable

Stop RightFax service.

stop-service rfexchconn

**Install the Service Pack - setup.exe**

Get-Service \*exchange\*

Many times, Exchange services don't start up as expected after an update.

Rebooted

Apply more updates, if needed.  Rinse, Repeat.

Stop RightFax if more updates…

Enable Forefront.  Services have to be stopped before this can kick in again (see above).

C:\Program Files (x86)\Microsoft Forefront Protection for Exchange Server\fscutility /enable

At this stage you might move all of the active mailbox databases to the server that was just updated so that you can update the other servers in the DAG. After all of the DAG members have been updated it is likely that mailbox databases will be active on servers that are not their first activation preference.

For Exchange Server 2010 RTM you can view the activation preferences for each database, and manually move active mailbox databases to their preferred server.

Get-MailboxDatabase | fl name,activationpreference

Move-ActiveMailboxDatabase "DBNAME" -ActivateOnServer SERVERNAME

cd $exscripts

.\StopDagServerMaintenance.ps1 -serverName SERVERNAME

The script will automatically reverse each of the actions made by StartDagServerMaintenance.ps1 except that it will not move active mailbox databases back to the server.

To move the active mailbox databases you can continue to go to each mailbox server in the DAG and run StartDagServerMaintenance.ps1 and perform your updates. When all of the servers have been updated you can[rebalance the DAG](http://exchangeserverpro.com/how-to-rebalance-mailbox-databases-in-a-dag-with-exchange-server-2010-sp1) automatically using a script from Microsoft which is demonstrated [here](http://exchangeserverpro.com/how-to-rebalance-mailbox-databases-in-a-dag-with-exchange-server-2010-sp1).

Exchange Server 2010 Service Pack 1 shipped with a script that allows you to automatically redistribute mailbox databases to their first [activation preference](http://technet.microsoft.com/en-us/library/dd979802.aspx). The script can be found in the \Scripts folder of the Exchange Server 2010 installation path, which by default would be C:\Program Files\Microsoft\Exchange\V14\Scripts.

You can use the script to output a report of the current mailbox database distribution among the DAG members

.\RedistributeActiveDatabases.ps1 -DagName DAGNAME -ShowDatabaseDistributionByServer | ft

.\RedistributeActiveDatabases.ps1 -DagName DAGNAME -BalanceDbsByActivationPreference

Get-MailboxDatabase | ft name, server, activationpreference -AutoSize

Turn off maintenance mode in SCOM

Re-enable the F5 monitors