

Exchange 2007 –Message Size Limits

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Abstract

In this article I will show you how to set size limits for messages in Exchange Server 2007.

Let`s begin

In my previous [article](#) I showed you how set message size limits in Exchange Server 2003. Exchange Server 2007 is somewhat more different and I will try to show you where you can limit the message size.

It is possible to set size limits for messages in your Exchange organization on several objects in the Exchange Management Console or with the Exchange Management Shell. This article will show you where you can set these limits and how they interact.

Scope of Limits

It is possible to apply message size filters on different areas in Exchange Server 2007. It is possible to set message size limits at the Organization level. The limits that you apply here apply to all Exchange Server 2007 in your Exchange organization and you will need appropriate permissions to set limits at the organization level. If you deployed more than one Hub Transport Server (HTS) than all these limits apply to all Hub Transport Servers. If you are using the Exchange Edge Transport Server (ETS), message size limits apply to the specific Exchange Edge Server.

Global limits are used when you have a mixed Exchange Server 2003 / 2007 environment. Global settings apply to all Exchange Servers 2003 and 2007 because these Message size limits are stored in Active Directory. These global settings are equivalent to the global settings section in the Exchange Server 2003 System Manager. When the settings on the Organizational level conflicts with the Global limits, the lowest setting takes precedence.

It is also possible to define message size limits on Exchange Server 2007 Connectors. Exchange Server 2007 uses send connectors; receive connectors and foreign connectors to give interoperability with none “Standard” or Legacy messaging systems. Message size limits for connectors are bound to the specific Exchange Edge Transport or Hub Transport Server.

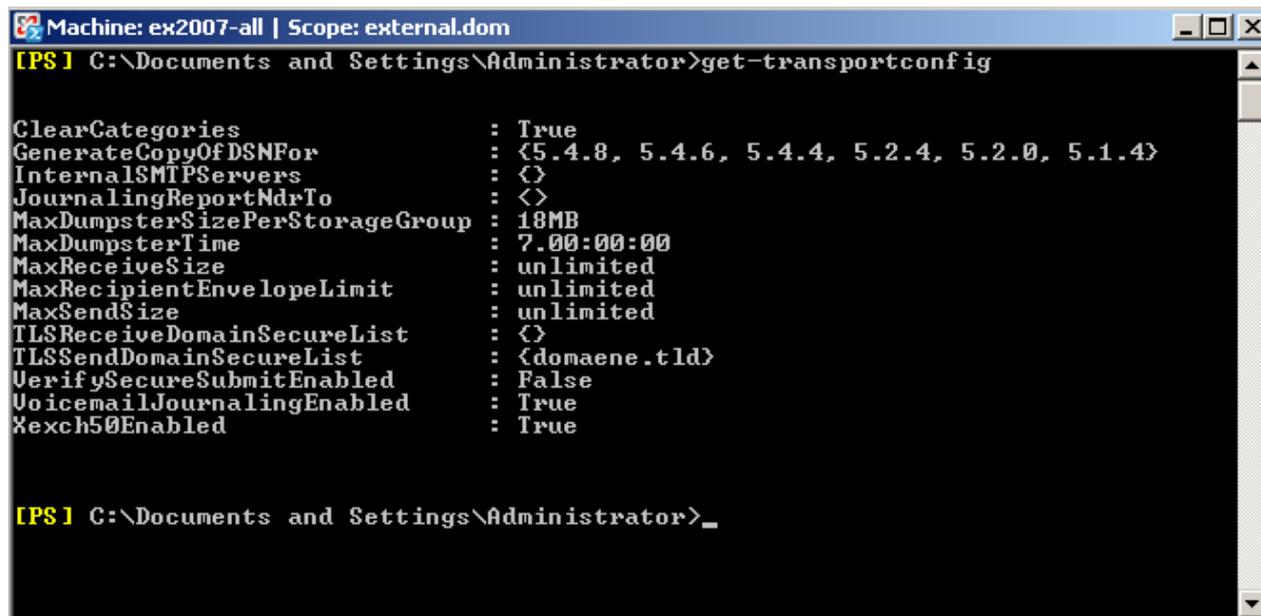
Another way to apply message size limits is to set specific limits at the Server level. Limits that you define here are applied to the specific Exchange Hub Transport Server or Edge Transport Server because message limits are not stored in Active Directory.

The last place where it is possible to apply message size limits are objects like Mailboxes, Mail Users, Mail contacts, Public folders and distribution groups.

Global Limits

For the most configuration settings we will use the Exchange Management Shell (EMS). This is the preferred method for setting message size limits.

If you want to see the global settings for the Exchange Transport configuration, use the Exchange Management Shell CMDLet *GET-TRANSPORTCONFIG*.



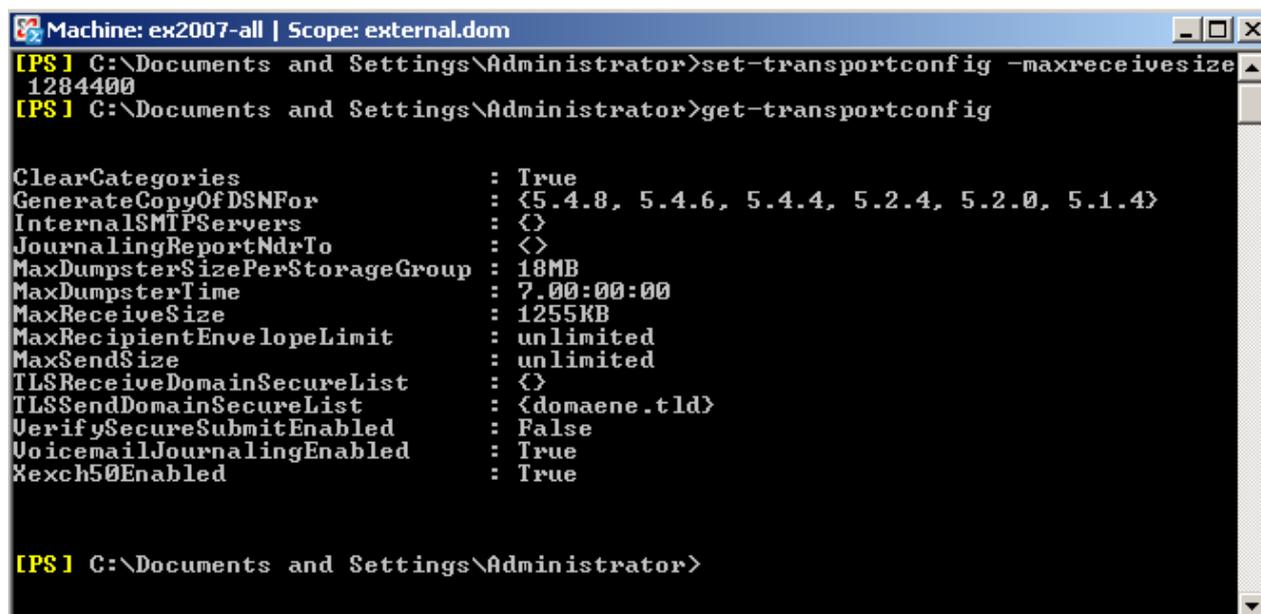
```
Machine: ex2007-all | Scope: external.dom
[PS] C:\Documents and Settings\Administrator>get-transportconfig

ClearCategories                : True
GenerateCopyOfDSNFor          : <5.4.8, 5.4.6, 5.4.4, 5.2.4, 5.2.0, 5.1.4>
InternalSMTPServers            : <>
JournalingReportNdrTo         : <>
MaxDumpsterSizePerStorageGroup : 18MB
MaxDumpsterTime                : 7.00:00:00
MaxReceiveSize                 : unlimited
MaxRecipientEnvelopeLimit     : unlimited
MaxSendSize                    : unlimited
TLSReceiveDomainSecureList    : <>
TLSSendDomainSecureList       : <domaene.tld>
VerifySecureSubmitEnabled     : False
VoicemailJournalingEnabled    : True
Xexch50Enabled                 : True

[PS] C:\Documents and Settings\Administrator>_
```

Figure 1: GET-TRANSPORTCONFIG

If you want to change message size settings you must use the CMDLet *SET-TRANSPORTCONFIG*. To change the maximum message size for Receive messages, use the following CMDLet:



```
Machine: ex2007-all | Scope: external.dom
[PS] C:\Documents and Settings\Administrator>set-transportconfig -maxreceivesize 1284400
[PS] C:\Documents and Settings\Administrator>get-transportconfig

ClearCategories                : True
GenerateCopyOfDSNFor          : <5.4.8, 5.4.6, 5.4.4, 5.2.4, 5.2.0, 5.1.4>
InternalSMTPServers            : <>
JournalingReportNdrTo         : <>
MaxDumpsterSizePerStorageGroup : 18MB
MaxDumpsterTime                : 7.00:00:00
MaxReceiveSize                 : 1255KB
MaxRecipientEnvelopeLimit     : unlimited
MaxSendSize                    : unlimited
TLSReceiveDomainSecureList    : <>
TLSSendDomainSecureList       : <domaene.tld>
VerifySecureSubmitEnabled     : False
VoicemailJournalingEnabled    : True
Xexch50Enabled                 : True

[PS] C:\Documents and Settings\Administrator>
```

Figure 2: SET-TRANSPORTCONFIG

If you want to set a maximum message size for messages send to users outside the Exchange organization, use the following CMDLet:

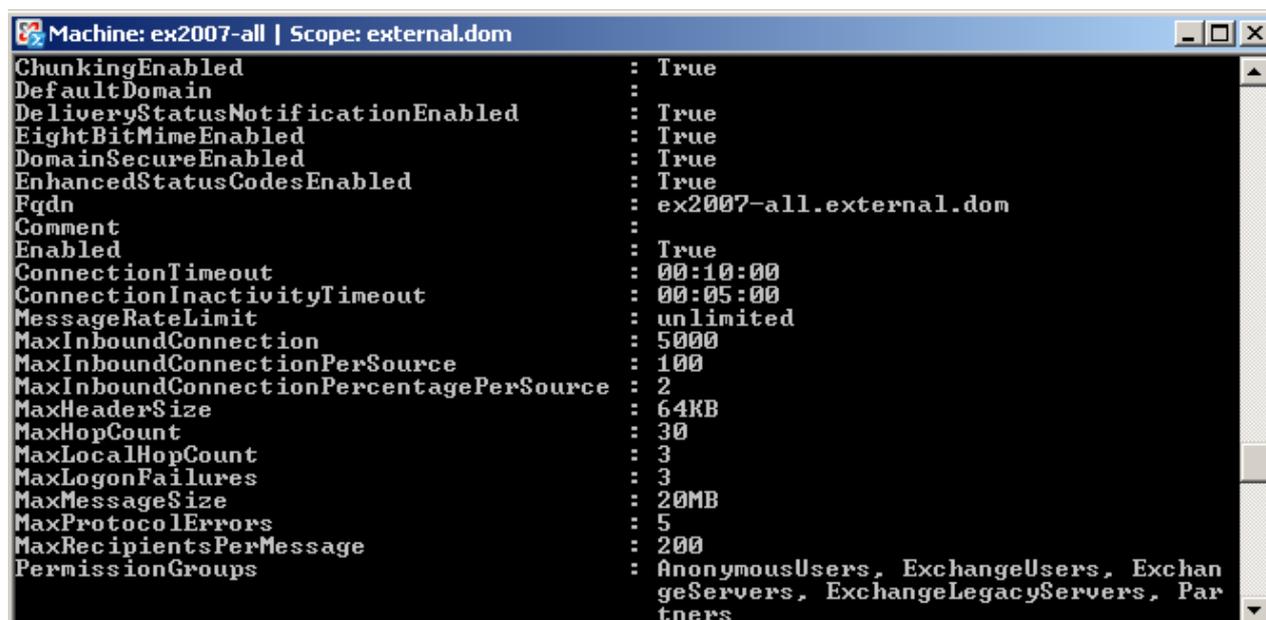
Set-Transportconfig –maxsendsize

Connector Limits

As mentioned above, it is also possible to set message size limits for Exchange Server 2007 Send Connectors, receive Connectors and Foreign Connectors.

If you want to see the number of Exchange Receive connectors, use the following CMDLet:

Get-receiveconnector | List



```
Machine: ex2007-all | Scope: external.dom
ChunkingEnabled : True
DefaultDomain :
DeliveryStatusNotificationEnabled : True
EightBitMimeEnabled : True
DomainSecureEnabled : True
EnhancedStatusCodesEnabled : True
Fqdn : ex2007-all.external.dom
Comment :
Enabled : True
ConnectionTimeout : 00:10:00
ConnectionInactivityTimeout : 00:05:00
MessageRateLimit : unlimited
MaxInboundConnection : 5000
MaxInboundConnectionPerSource : 100
MaxInboundConnectionPercentagePerSource : 2
MaxHeaderSize : 64KB
MaxHopCount : 30
MaxLocalHopCount : 3
MaxLogonFailures : 3
MaxMessageSize : 20MB
MaxProtocolErrors : 5
MaxRecipientsPerMessage : 200
PermissionGroups : AnonymousUsers, ExchangeUsers, ExchangeServers, ExchangeLegacyServers, Partners
```

Figure 3: GET-RECEIVECONNECTOR

If you want to see the configuration of Exchange Send connectors, use the following CMDLet:

Get-sendconnector | List

```

Machine: ex2007-all | Scope: external.dom

[PS] C:\Documents and Settings\Administrator>get-sendconnector | list

AddressSpaces           : {smtp:*.domaene.tld;1}
AuthenticationCredential : System.Management.Automation.PSCredential
Comment                 :
ConnectedDomains        : {}
ConnectionInactivityTimeout : 00:10:00
DNSRoutingEnabled       : False
DomainSecureEnabled     : False
Enabled                  : True
ForceHELO                : False
Fqdn                     : ex2007-all.external.dom
HomeMTA                  : Microsoft MTA
HomeMtaServerId         : EX2007-ALL
Identity                 : Raas
IgnoreSTARTTLS           : False
IsScopedConnector        : False
IsSmtpConnector          : True
LinkedReceiveConnector   :
MaxMessageSize           : 10MB
Name                     : Raas
Port                     : 25

```

Figure 4: GET-SENDCONNECTOR

If you want to change the message size limit for a connector, use the following CMDLet:

SET-SENDCONNECTOR -IDENTITY RAAS -MaxMessageSize MessageSizeYouWant

Please note:

You must use the *-IDENTITY* parameter only if there are more than one send connectors on the server.

Server Limits

It is possible to set many message size limits directly on the Server.

The CMDLet: *GET-TRANSPORTSERVER | LIST* displays all settings on the specific Transport Server.

```

Machine: ex2007-all | Scope: external.dom

MaxConcurrentMailboxDeliveries : 7
MaxConcurrentMailboxSubmissions : 20
MaxConnectionRatePerMinute      : 1200
MaxOutboundConnections          : 1000
MaxPerDomainOutboundConnections : 20
MessageExpirationTimeout        : 2.00:00:00
MessageRetryInterval             : 00:01:00
MessageTrackingLogEnabled        : True
MessageTrackingLogMaxAge         : 30.00:00:00
MessageTrackingLogMaxDirectorySize : 250MB
MessageTrackingLogMaxFileSize    : 10MB
MessageTrackingLogPath           : C:\Program Files\Microsoft\Exchange S
erver\TransportRoles\Logs\MessageTrac
king
MessageTrackingLogSubjectLoggingEnabled : True
OutboundConnectionFailureRetryInterval : 00:10:00
IntraOrgConnectorProtocolLoggingLevel : None
PickupDirectoryMaxHeaderSize     : 64KB
PickupDirectoryMaxMessagesPerMinute : 100
PickupDirectoryMaxRecipientsPerMessage : 100
PickupDirectoryPath              : C:\Program Files\Microsoft\Exchange S
erver\TransportRoles\Pickup
PipelineTracingEnabled           : False
ContentConversionTracingEnabled  : False
PipelineTracingPath              : C:\Program Files\Microsoft\Exchange S

```

Figure 5: GET-TRANSPORTSERVER

If you want to change some settings for the Transport Server you must use the CMDLet *SET-TRANSPORTSERVER* and the required switches and parameters.

User limits

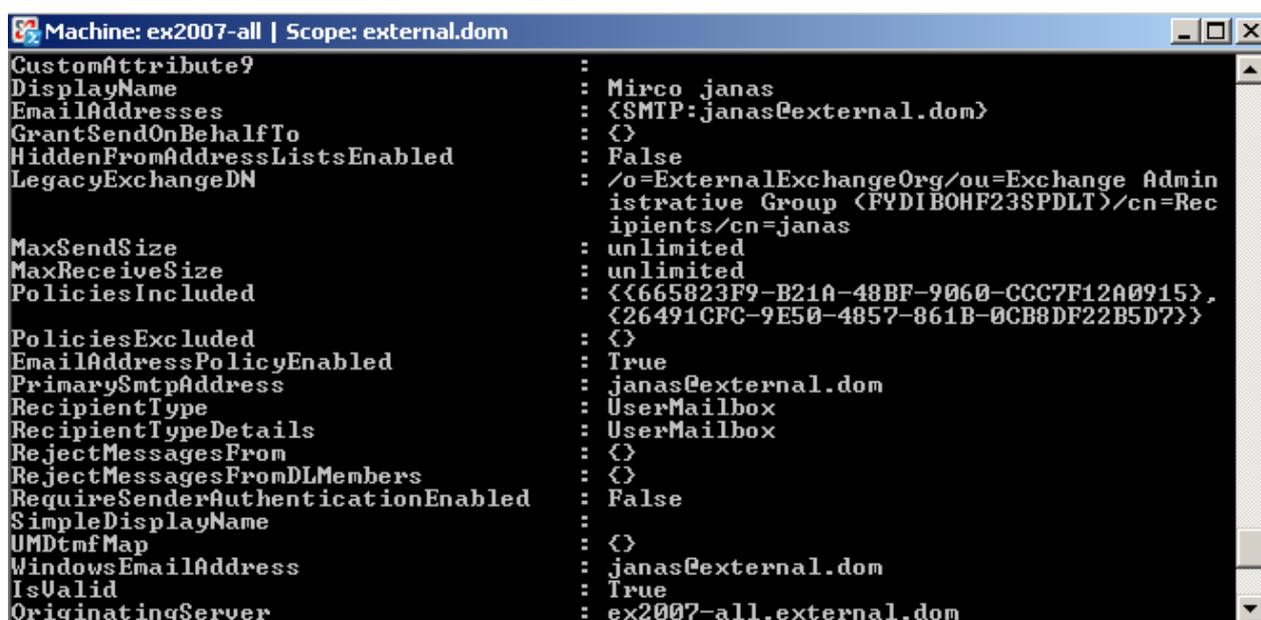
Exchange Server 2007 can apply a lot of message size limits on the following objects:

- Mailbox-User
- Mail-Contact
- Mail-User
- PublicFolder
- Distribution Group

Mailbox-User

It is possible to set message size limits on every Exchange Mailbox. The following CMDLet *GET-Mailbox* shows all mailboxes from the specific Mailbox server.

The CMDLet *GET-Mailbox -identity Janas | List* show the mailbox details and the *MaxSendSize* and the *MaxReceiveSize*.



```
Machine: ex2007-all | Scope: external.dom
CustomAttribute9 :
DisplayName      : Mirco Janas
EmailAddresses   : <SMTP:janas@external.dom>
GrantSendOnBehalfTo :
HiddenFromAddressListsEnabled : False
LegacyExchangeDN : /o=ExternalExchangeOrg/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=janas
MaxSendSize      : unlimited
MaxReceiveSize   : unlimited
PoliciesIncluded : <<665823F9-B21A-48BF-9060-CCC7F12A0915>, <26491CFC-9E50-4857-861B-0CB8DF22B5D7>
PoliciesExcluded :
EmailAddressPolicyEnabled : True
PrimarySmtpAddress : janas@external.dom
RecipientType    : UserMailbox
RecipientTypeDetails : UserMailbox
RejectMessagesFrom :
RejectMessagesFromDLMembers :
RequireSenderAuthenticationEnabled : False
SimpleDisplayName :
UMDtmfMap        :
WindowsEmailAddress : janas@external.dom
IsValid          : True
OriginatingServer : ex2007-all.external.dom
```

Figure 6: GET-MAILBOX

If you want to change settings for the mailbox use the following CMDLet:

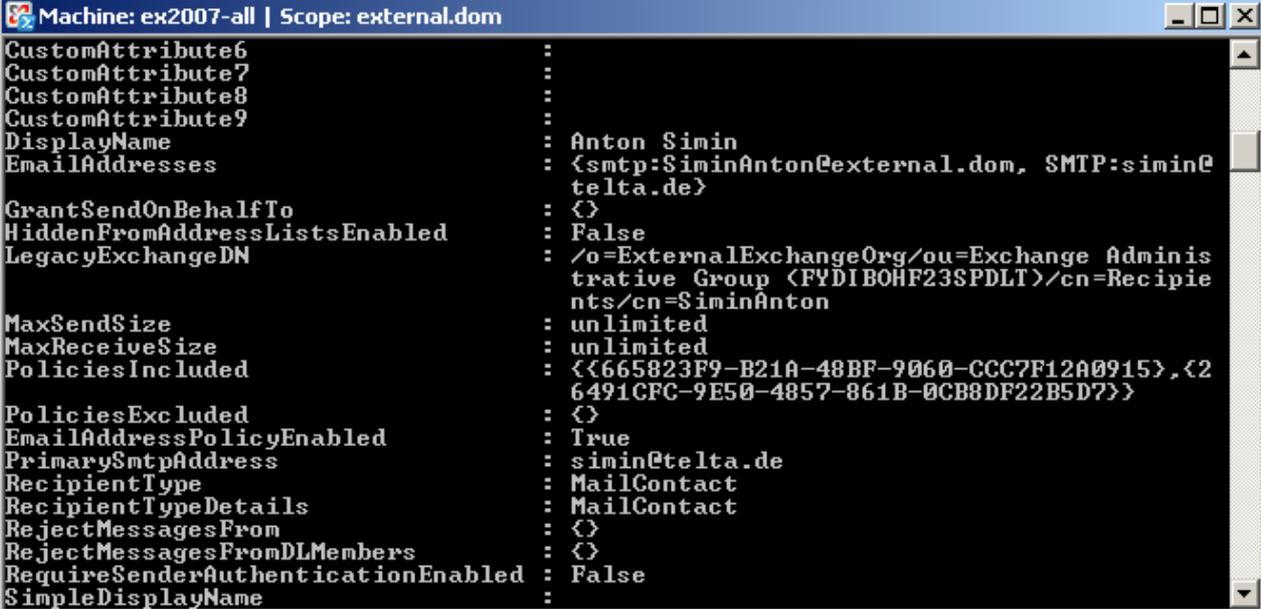
```
SET-Mailbox -Identity Janas -MaxSendSize 1038400
```

With the help of piping it is possible to change specific settings for all or a selected number of mailboxes.

Mail Contact

You can use the same procedure to display the settings for mail contacts or to change some settings related to message sizes.

Get-MailContact –Identity SiminAnton | List



```
Machine: ex2007-all | Scope: external.dom
CustomAttribute6 :
CustomAttribute7 :
CustomAttribute8 :
CustomAttribute9 :
DisplayName : Anton Simin
EmailAddresses : <smtp:SiminAnton@external.dom, SMTP:simin@
                telta.de>
GrantSendOnBehalfTo : {}
HiddenFromAddressListsEnabled : False
LegacyExchangeDN : /o=ExternalExchangeOrg/ou=Exchange Adminis
                  trative Group (FYDIBOHF23SPDLT)/cn=Recipie
                  nts/cn=SiminAnton
MaxSendSize : unlimited
MaxReceiveSize : unlimited
PoliciesIncluded : <<665823F9-B21A-48BF-9060-CCC7F12A0915>,<2
                  6491CFC-9E50-4857-861B-0CB8DF22B5D7>
PoliciesExcluded : {}
EmailAddressPolicyEnabled : True
PrimarySmtpAddress : simin@telta.de
RecipientType : MailContact
RecipientTypeDetails : MailContact
RejectMessagesFrom : {}
RejectMessagesFromDLMembers : {}
RequireSenderAuthenticationEnabled : False
SimpleDisplayName :
```

Figure 7: GET-MAILCONTACT

If you want to change settings use the CMDLet:

Set-Mailcontact –Identity SiminAnton –MaxSendSize 10240000

Mail-PublicFolder

If you want to change the message size limits for public folders, you must use the Exchange System Manager from Exchange Server 2003 or the Exchange Management Shell (EMS). With Exchange Server 2007 SP1 it will be possible to manage public folders with the Exchange Management console. As of writing this tutorial, Exchange Server 2007 SP1 is still in beta, so we use the EMS and the following CMDLet:

Get-MailPublicFolder –Identity MExchange | List

This CMDLet displays all the settings for the public folder called *MExchange*. If you want to change settings use the CMDLet? – yes – very good *Set-MailPublicFolder –Identity MExchange*

Public Folder size limits with Exchange Server 2007 SP1 (Beta)

Here is a preview on the upcoming Exchange Server 2007 SP1. With the help of SP1 you have a public folder console in the Exchange toolbox which is dedicated for public folder management.

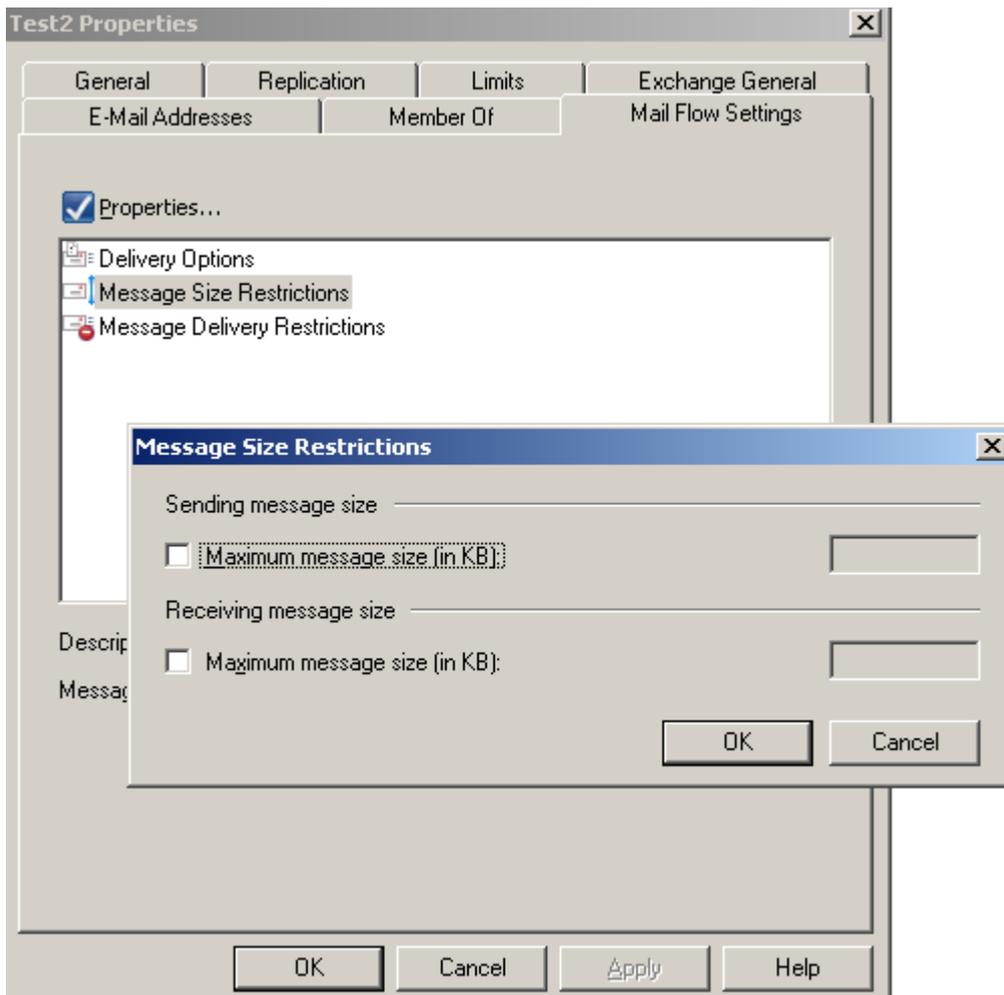


Figure 8: Public Folder limits in Exchange Server 2007 SP1 (Beta)

Distribution group

It is possible to set message size limits on distribution groups with the EMC and EMS. The following picture shows the EMC to set message size limits.

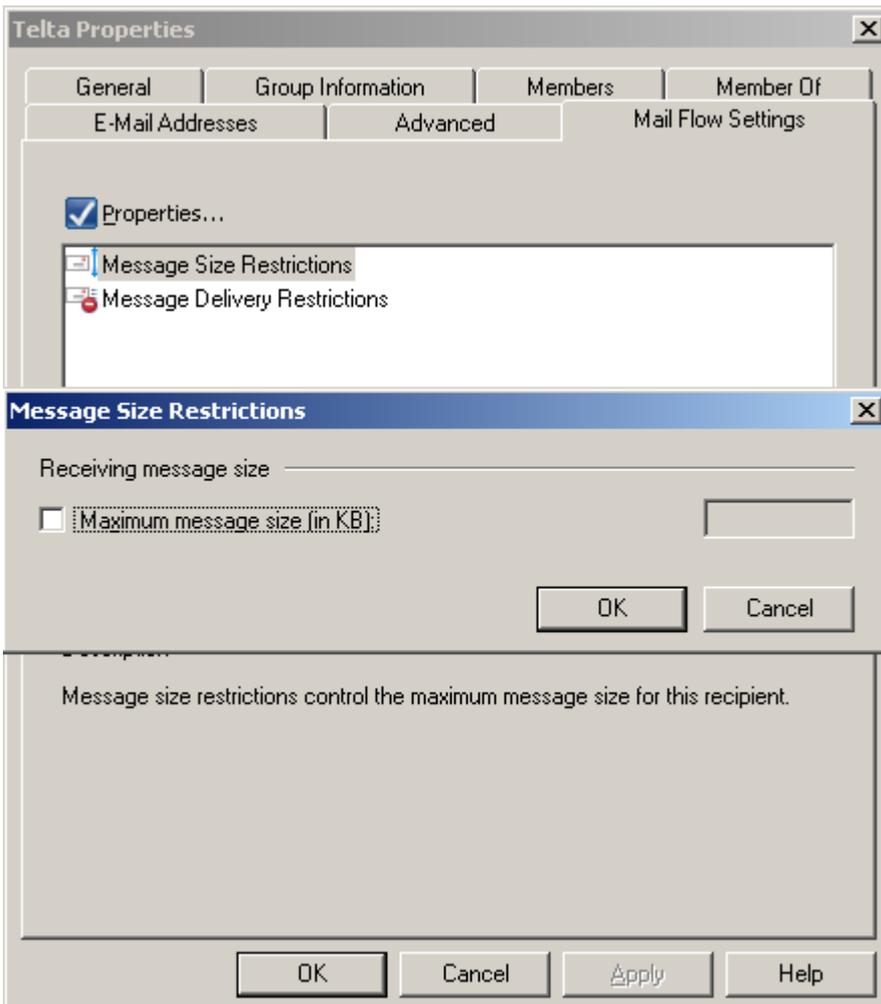


Figure 9: Message size limits for a Distribution group

You can use the GUI (EMC) or the EMS to set message size limits for distribution groups. If you want to use the EMS, use the following CMDLet:

Get-DistributionGroup -Identity Telta | List – Displays the settings for the Distribution group named *Telta*.

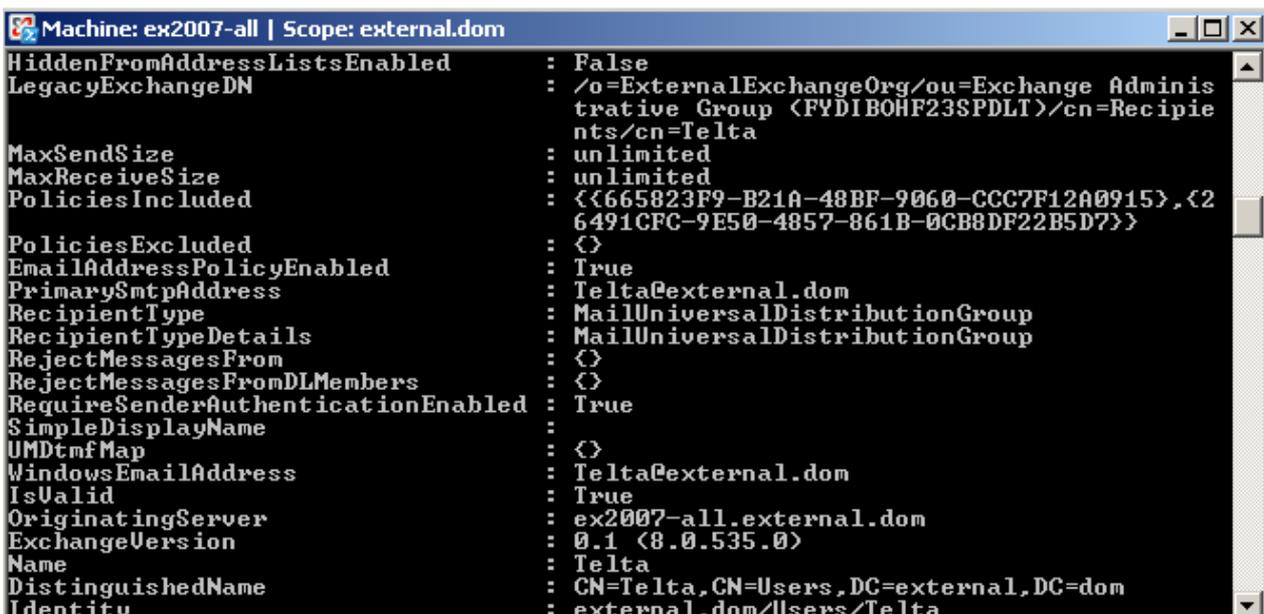


Figure 10: Display message size limits for a distribution group

If you want to change some settings use the CMDLet:

```
Set-DistributionGroup -Identity Telta -MaxReceiveSize 10240000
```

Different message size limits handling between Exchange Server 2003 and 2007

Exchange Server 2007 handles message size limits to recipients of distribution list in a different way. While members of a distribution list in Exchange Server 2003 treats each member of this distribution group as an individual member so it was possible that some members didn't receive any message due to message size limits. To avoid this possible problem, Exchange Server 2007 handles all members of a distribution list as one member, so message size restrictions can be better controlled for members of distribution lists.

Conclusion

It is possible to set size limits on several objects in Exchange Server 2007. You should know where to set this limits and how they interact. This article doesn't explained all the locations where it is possible to set message size limits but this should be enough for the most purposes.

Related Links

Managing Message Size Limits in Exchange Server 2007

<http://technet.microsoft.com/en-us/library/bb124345.aspx>

Message Size Limits in Exchange Server 2003

<http://www.msexchange.org/tutorials/Set-Size-Limits-Messages.html>