

Configuring Hosting Controller with Exchange 2013 & 2016

A Comprehensive Guide

Contents

Proprietary Notice	1
Introduction	2
Minimum System Requirements for Exchange 2013	2
Exchange 2016 and what's new in it	2
Discontinuation of the Client Access Server (CAS) role	2
Minimum System Requirements for Exchange 2016	2
Integration of Exchange 2016 with Hosting Controller	2
Minimum System Requirements for Hosting Controller	3
Hosting Controller Exchange Deployment Scenario	3
Installing Hosting Controller	4
Configurations required on Exchange Server to connect with HC	5
Enabling Remote Power Shell	5
Domain Admin User	5
Understanding HC User Structure	6
Understanding Exchange Segregation	6
Configuring the panel	7
Additional Configuration of Exchange Server at Service Provider Level	9
Contact Us	10

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Introduction

Hosting Controller Exchange module is tightly integrated with Microsoft Exchange Server to ensure provisioning of all the required features for the service providers to deploy and manage Exchange Hosting over any type of infrastructure.

This article provides information regarding minimum system requirements for installing Exchange 2013 & 2016 and configuring it with Hosting Controller. In addition, it comprehensively states steps to install Hosting Controller, its user hierarchy and all its required configurations.

Minimum System Requirements for Exchange 2013

Hosting Controller is your one stop shop to efficient management of Exchange 2013. It not only allows hosting companies and service providers to manage their Exchange 2013 offerings under one roof but also lets them segregate their tenants into compact containers. This section of the document provides a clear picture of exactly what you need to setup Exchange 2013 servers. If you are new to Exchange 2013 please view the following link to have a better understanding of the system requirements:

[https://technet.microsoft.com/library/aa996719\(v=exchg.150\).aspx](https://technet.microsoft.com/library/aa996719(v=exchg.150).aspx)

Exchange 2016 and what's new in it

The latest addition to the Microsoft Exchange line is the Exchange Server 2016 and it brings with it the promise of a more collaboration focused approach. In order to remain in line with this greater objective, a number of previous components, features and functionality have been discontinued or altered in Exchange 2016.

Discontinuation of the Client Access Server (CAS) role

The most visible transformation from Exchange 2013 to 2016 is the removal of the Client Access Server (CAS) role. Now this role has been replaced by Client Access services that run on the Mailbox server role. The Mailbox server role assumes a more central position in the overall Exchange 2016 architecture.

Minimum System Requirements for Exchange 2016

The minimum system requirements for installing Exchange 2016 can be viewed at the below link:

[https://technet.microsoft.com/en-us/library/aa996719\(v=exchg.160\).aspx](https://technet.microsoft.com/en-us/library/aa996719(v=exchg.160).aspx)

Integration of Exchange 2016 with Hosting Controller

As always Hosting Controller has earned the distinction of being one of the foremost cloud automation solutions providing synergic integration of Exchange 2016. Besides taking advantage of a wide array of inbuilt communication features, it adeptly presents a multi-tiered; web based provisioning solution to on-premises and cloud service providers. Though emphasis still remains on segregation of tenants and curtailing of the total cost of infrastructure ownership, Hosting Controller Exchange 2016 module encourages its users to adopt Remote Management.

The Exchange Remote Management feature necessitates Exchange servers independent of a Hosting Controller software installation and communication rather only through remote power shell commands. This implementation provides the benefit of a completely clean and isolated Exchange infrastructure, without the unnecessary burden of extra software.

Minimum System Requirements for Hosting Controller

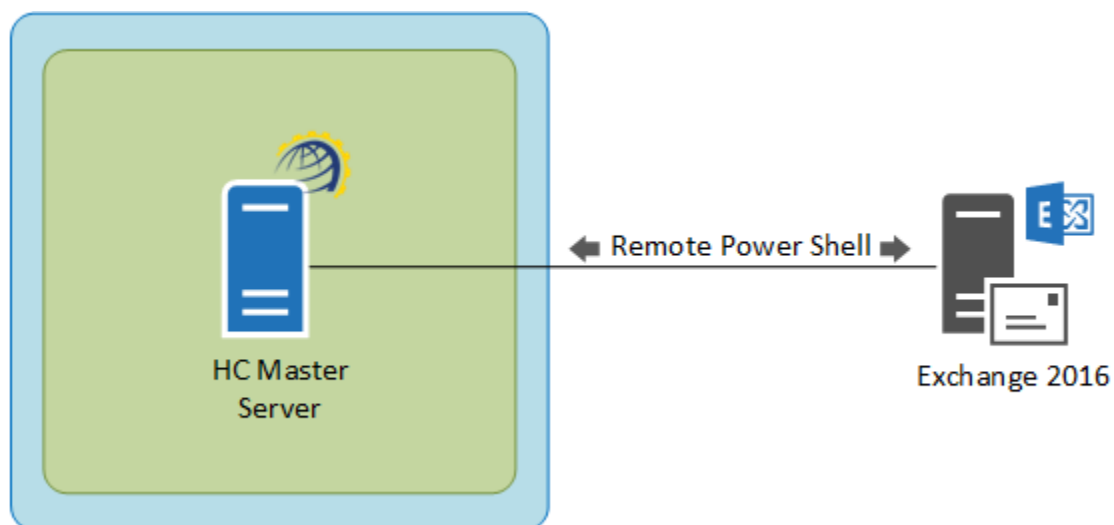
Once your Exchange Servers are ready it's time to install Hosting Controller. MSSQL is the major pre-requisite for storing Hosting Controller backend database and for its frontend IIS webserver coupled with .NET 3.5 is required. For further information regarding Hosting Controller's prerequisites, please refer to the link below:

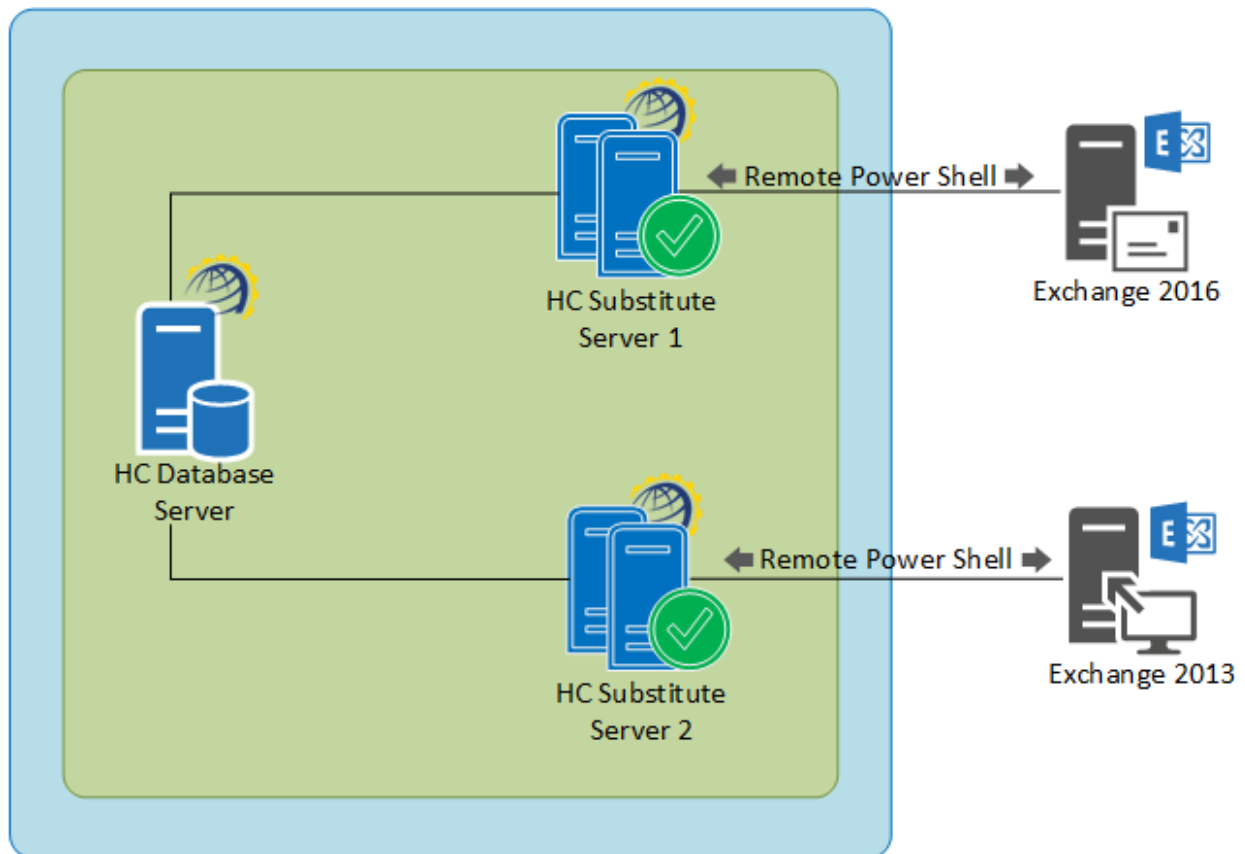
http://help.hostingcontroller.com/hc9/default.aspx?pageid=System_Requirements

Hosting Controller Exchange Deployment Scenario

For Exchange 2013 and 2016 it's recommended that the Exchange servers should not carry any installation of Hosting Controller software. Hosting Controller advocates a neat and clean Exchange infrastructure and furthering this objective requires that no installation of Hosting Controller be done on the Exchange servers.

Instead of a direct installation of HC on the Exchange boxes, it's recommended that separate servers should be deployed with Hosting Controller. These separate servers should then be added to the HC cluster with Mail role. Each of these substitute servers should communicate with the original Exchange servers through remote power shell commands. Taking advantage of this Remote Management feature the Exchange servers can largely be spared of bearing the burden of unnecessary software and at the same time be able to create organization units (O.Us), mail domains, mailboxes, distribution groups and other Exchange related objects with ease.





Installing Hosting Controller

Download the installer from the following link:

<http://hostingcontroller.com/Hosting-Software-Downloads/Windows-Hosting-Automation.html>

Then apply it on your HC Master server. The installation itself is fairly simple. It permits a setup wizard to run and allows users to follow a step by step installation procedure. As stated previously HC should only be installed on the Master Controller with Mail role enabled on it.

No installation is required on the Exchange servers and HC Master Machine will communicate with Exchange servers through remote power shell commands. This not only makes the communication simple but also reduces the overhead of software installation on Exchange itself. Also it reduces the cost for multiple servers' setup as you can manage Exchange via only one machine.

Configurations required on Exchange Server to connect with HC

Certain after-install configurations form a vital part of the process and should positively be performed in order to run HC successfully with Exchange. Following are the configurations to be performed:

Enabling Remote Power Shell

As per Microsoft recommendations Hosting Controller communicates with Exchange 2013 and 2016 via Remote Power Shell. PS Remoting should be enabled on Exchange CAS server (in case of 2013) and MBX server (in case of 2016).

PS Remoting can be enabled with the help of the following steps:

1. Run **Enable-PSRemoting** command in Exchange Management Shell.
2. Enable **BASIC authentication** on Exchange PowerShell virtual directory in the IIS Manager under Default Web Site.
3. Ensure that the user providing his credentials has "Remote PowerShell" enabled
 - a. `get-user userName |fl RemotePowerShellEnabled`

PS: userName = replace it with actual user name i.e. Administrator

If above cmd shows RemotePowerShellEnabled as False then execute below command.

- b. `set-user Administrator -RemotePowerShellEnabled $True`

Domain Admin User

Any privileged user having rights to communicate with Exchange remotely over powershell must be specified in HC panel in order to establish a valid connection between the HC and Exchange machines. You can specify Domain Admin or any other privileged user credentials as shown in the screenshot below:

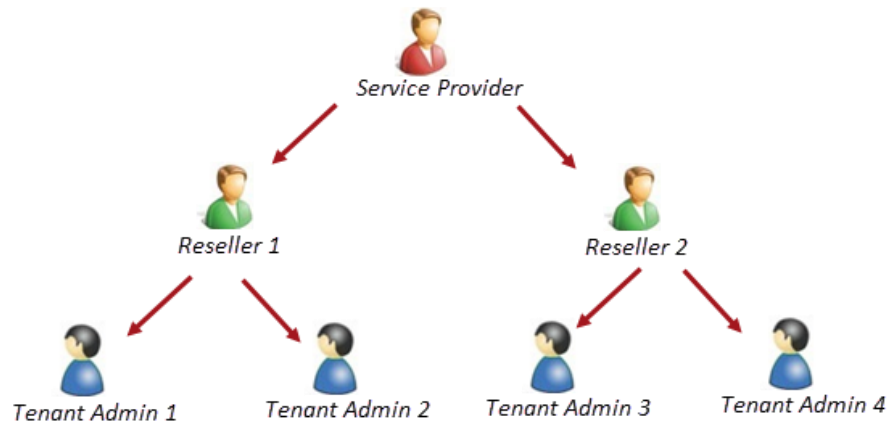
General Settings	
Mail Server Type :	Exchange2016 <input type="button" value="v"/>
Host Name or IP :	<input type="text" value="192.168.0.61"/>
Administrator Login :	<input type="text" value="dc\administrator"/>
Administrator Password :	<input type="password" value="....."/>
Confirm Password :	<input type="password" value="....."/>
Connect Server :	<input type="button" value="Connect"/>

Understanding HC User Structure

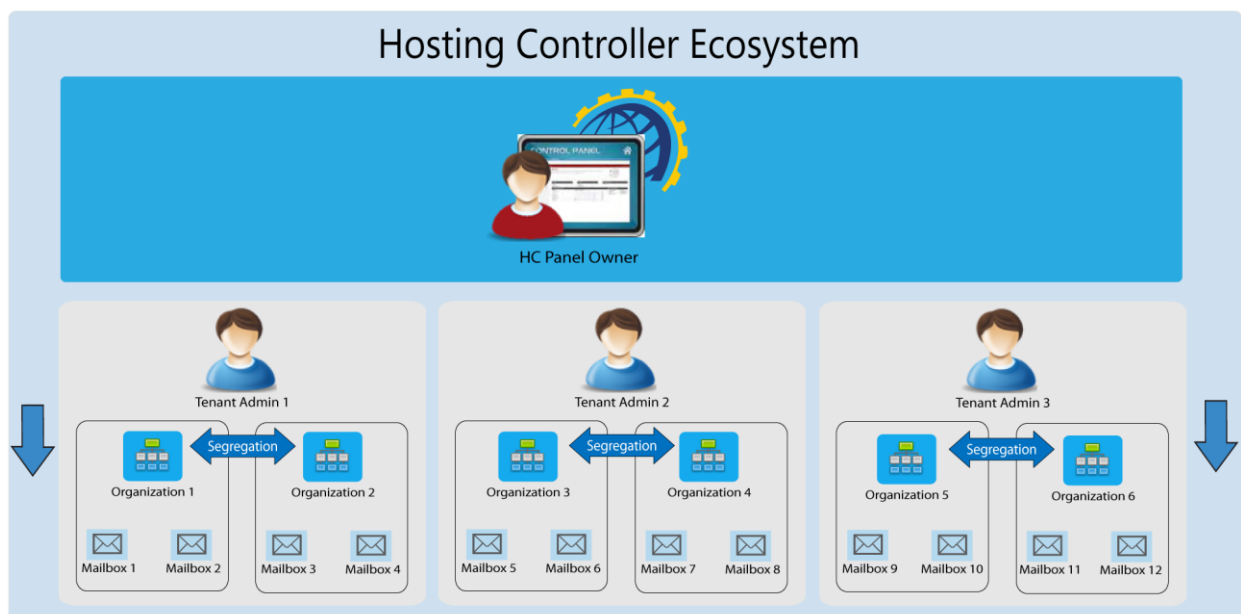
Hosting Controller works on a 3 tier user model. The hierarchy is as follows:

- Service Provider
- Reseller
- Tenant Admin (End User)

Exchange Mail Domains and Mailboxes cannot directly be created under the Service Provider level. At least one Reseller is mandatory. Resellers can in consequence add Hosted Organizations (O.U), Mail Domains and Mailboxes etc.



Understanding Exchange Segregation



Configuring the panel

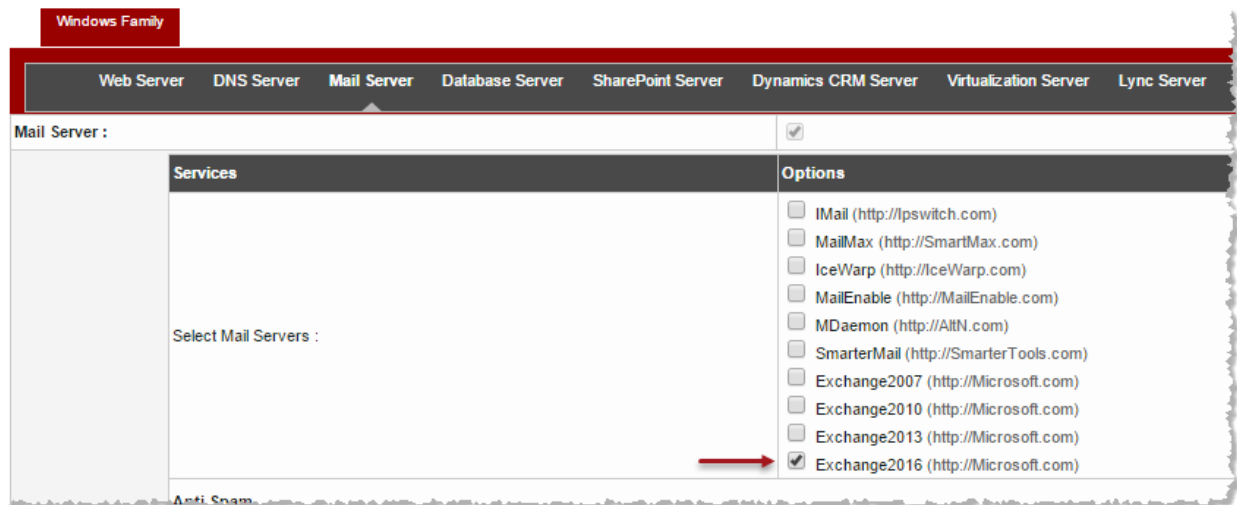
Follow the steps as stated to successfully configure Hosting Controller:

1. Log on to the panel as Service Provider



The image shows a 'Control Panel Login' form. It has three input fields: 'Username' with the value 'hcadmin', 'Password' with masked characters, and 'Language' set to 'English'. Below the fields are two buttons: 'Sign In' and 'Reset'. A paragraph of text below the buttons reads: 'If you have forgotten your password, click on the "Forgot Password" link to have a reminder sent to you at the e-mail address you specified during registration.' Below this text is a link labeled '[Forgot Password]'. At the bottom of the form, it says 'powered by Hosting Controller'.

2. Enable Exchange server role in the cluster



3. Add server in the cluster and assign mail role to it

Add a Server

Friendly Name :	AD123				
Primary IP Address :	192.168.0.61				
Operating System :	Windows Family				
What is the Role of this Server in the Cluster?					
<table border="1"><thead><tr><th>Server Role</th><th>Role Capacity</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/> Mail Server</td><td>500 Mail Domains</td></tr></tbody></table>		Server Role	Role Capacity	<input checked="" type="checkbox"/> Mail Server	500 Mail Domains
Server Role	Role Capacity				
<input checked="" type="checkbox"/> Mail Server	500 Mail Domains				
Add Server					

4. Specify Remote Power Shell logon credentials to connect

Mail Server

General Settings	
Mail Server Type :	Exchange2016
Host Name or IP :	192.168.0.61
Administrator Login :	dcladministrator
Administrator Password :
Confirm Password :
Connect Server :	Connect
Add Server	

HC automatically extracts information from Exchange server that can be easily modified later

Mail Server

General Settings	
Mail Server Type :	Exchange2016 ▾
Host Name or IP :	<input type="text" value="192.168.0.61"/>
Administrator Login :	<input type="text" value="dc\administrator"/>
Administrator Password :	<input type="password" value="....."/>
Confirm Password :	<input type="password" value="....."/>
Connect Server :	<div style="display: flex; align-items: center;"> Connect Server connected successfully! </div>
Act as Backup Server Only :	<input checked="" type="radio"/> No <input type="radio"/> Yes
Mail MX Record	
Mail MX IP Address :	<input type="text" value="192.168.0.61"/> (e.g. HUB or EDGE Server IP)
Mailbox Server Details	
EXCHANGE(192.168.0.61)	
Mailbox Database Selection Mode	
Mailbox Database Selection Mode :	<input type="radio"/> Automatic <input checked="" type="radio"/> Manual
Client Access Server Details	
Client Access Server :	EXCHANGE(192.168.0.61) ▾
OWA Access URL :	<input type="text" value="https://192.168.0.61/OWA"/>
Domain Controller Details	
Active Directory Mode :	<input type="radio"/> Local <input checked="" type="radio"/> Remote
Domain Controller :	Portal.domaincontroller.com ▾
Domain Administrator :	<input type="text" value="dc\administrator"/>
Administrator Password :	<input type="password" value="....."/>
Confirm Password :	<input type="password" value="....."/>
Verify User Credentials :	<div style="display: flex; align-items: center;"> Verify </div>
SRV Record	
SRV Record Enabled :	<input type="checkbox"/> Enable

Add Server

Additional Configuration of Exchange Server at Service Provider Level

A service provider can additionally configure the Exchange server under **Panel Configuration** section. For further information please refer to the following link:

http://help.hostingcontroller.com/hc9/default.aspx?pageid=exchange_module_configuration

The screenshot displays the 'Exchange Module Configuration :: Mail Stores :: Databases' window. On the left is a navigation sidebar with categories like 'Hosting Plans', 'Panel Users', 'Billing System', 'Hosting Services', 'Website Services', 'Reports', 'Administrative Tools', and 'Panel Configuration'. Under 'Panel Configuration', 'Exchange Module Conf.' is expanded to show 'Mail Stores' and its sub-items. The main area shows a 'Mailbox Databases' table with a 'Select Server' dropdown set to 'Portal (192.168.0.61)'. The table lists three databases: 'Mailbox Database 1175386872', 'HCTech', and 'HCTestmailboxdatabase', all of type 'Mailbox' and with a 'Mount Status' of 'True'. To the right of the table are three red buttons: 'Add Database', 'Dismount', and 'Delete'.

Database Name	Type	Mount Status
<input checked="" type="radio"/> Mailbox Database 1175386872	Mailbox	True
<input type="radio"/> HCTech	Mailbox	True
<input type="radio"/> HCTestmailboxdatabase	Mailbox	True

Contact Us

In case of any ambiguity/query regarding HC configuration with Exchange 2013 & 2016, please feel free to contact us at support@hostingcontroller.com.