



Shared IT Services for Higher Education & Research

Conference 2018

# PowerShell tools for Exchange Administration

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# A bit about myself



# EXCHANGE TOOLS TO SET/RESET:

- Mailbox permissions
- Calendar permissions
- Send As permissions
- Send on Behalf permissions
- Unified Voice messaging
- Out of office message



# What is PowerShell?

Built on the .NET Framework, PowerShell is a task-based command-line shell and scripting language; it is designed specifically for system administrators and power-users, to rapidly automate the administration of multiple operating systems (Linux, MacOS, Unix, and Windows) and the processes related to the applications that run on those operating systems.

Windows PowerShell introduces the concept of a cmdlet (pronounced "command-let"), a simple, single-function command-line tool built into the shell. You can use each cmdlet separately, but their power is realized when you use these simple tools in combination to perform complex tasks. Windows PowerShell includes more than one hundred basic core cmdlets, and you can write your own cmdlets and share them with other users.



# Warning:

## PowerShell is powerful!

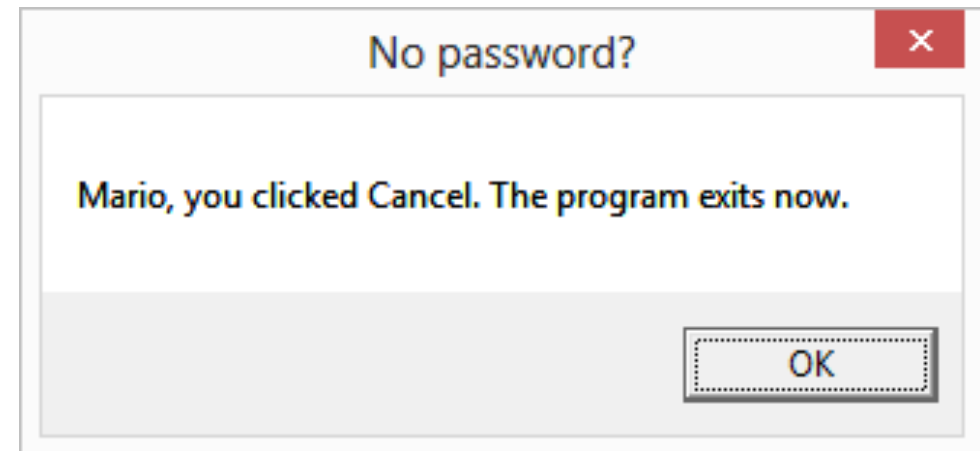
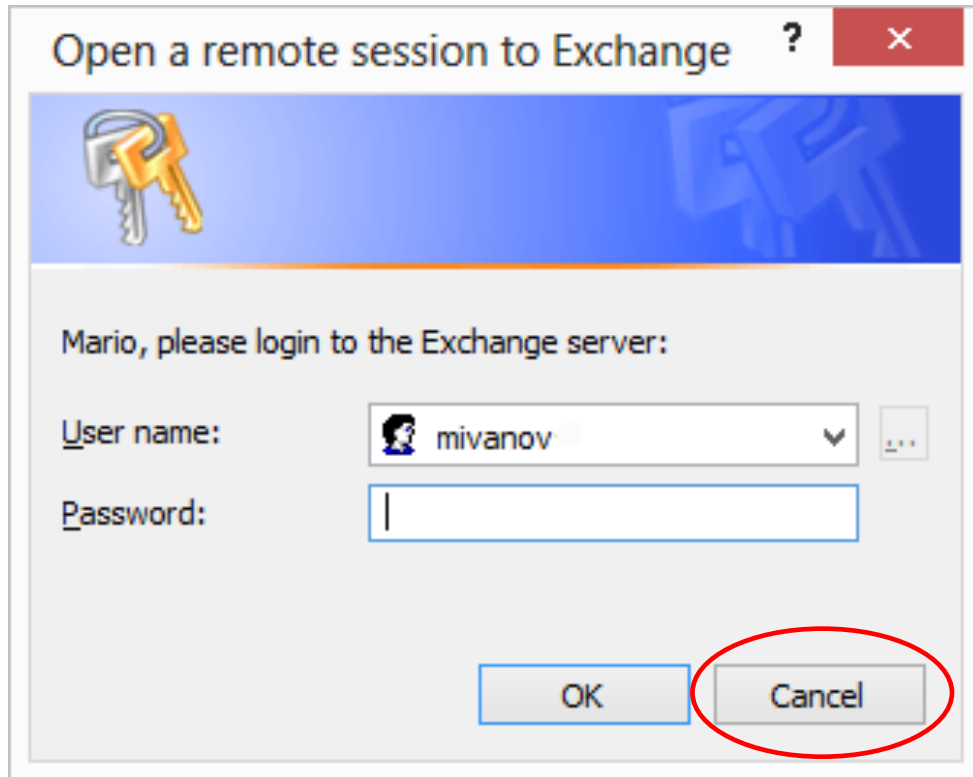
- Beginners should always start with non-intrusive commandlets i.e. starting with “Get-”
- The “dangerous” ones start with “Set-”, “Remove-” etc.

# Example

**Get-Mailbox** - returns a huge amount of properties belonging to an Exchange mailbox, literally above 200. Among them:

- Display name
- Database name
- Forwarding address,
- If they have a picture
- If hidden in the Global Address List

# Logging to the Exchange server



```
1 $UserCredential=Get-Credential
2
3 New-PSSession -ConfigurationName Microsoft.Exchange `
4               -ConnectionUri ("http://server.uvic.ca/") `
5               -Authentication Kerberos -Credential $UserCredential
```



\_powershell\_



Permissions on mailbox: dss1

User	Access
allychen	Full Access
jpotton	Full Access
mivanov	Full Access
pdickson	Full Access

User	Extended Rights
dstreet	Send-As
jpotton	Send-As
mivanov	Send-As

Send-on-behalf granted to:  
allychen

---

The above permissions info is already copied into the clipboard  
Paste it in an email to the client and format with a monospaced font

Update the ticket!



# Switching to GUI

- Windows Forms a.k.a. Winforms

WinForms is a graphical (GUI) class library included as a part of Microsoft .NET Framework, providing a platform to write rich client applications for desktop, laptop, and tablet PCs.

Being a first generation GUI building technology, WinForms UI layout is very simplistic and limited. Controls are placed using distance from the top-left point of a window and their size is explicitly specified. The size of controls can't compensate automatically when resizing windows... etc. (From Wikipedia)

- WPF

```
122 #~~< CheckBoxHiddenInGAL >~~~~~
123 $CheckBoxHiddenInGAL = New-Object System.Windows.Forms.CheckBox
124 $CheckBoxHiddenInGAL.Location = New-Object System.Drawing.Point(205, 101)
125 $CheckBoxHiddenInGAL.Size = New-Object System.Drawing.Size(167, 27)
126 $CheckBoxHiddenInGAL.TabIndex = 24
127 $CheckBoxHiddenInGAL.Text = "Hidden in GAL"
128 $CheckBoxHiddenInGAL.UseVisualStyleBackColor = $true
129 $CheckBoxHiddenInGAL.Add_CheckStateChanged({CheckBoxHiddenInGALClick($CheckBoxHiddenInGAL)})
130 $CheckBoxHiddenInGAL.Enabled=$False
131 #~~< ButtonCopyClipboard >~~~~~
132 $ButtonCopyClipboard = New-Object System.Windows.Forms.Button
133 $ButtonCopyClipboard.Location = New-Object System.Drawing.Point(520, 628)
134 $ButtonCopyClipboard.Size = New-Object System.Drawing.Size(83, 26)
135 $ButtonCopyClipboard.TabIndex = 23
136 $ButtonCopyClipboard.Text = "Clipboard"
137 $ButtonCopyClipboard.UseVisualStyleBackColor = $true
138 $ButtonCopyClipboard.add_Click({ButtonCopyClipboardClick($ButtonCopyClipboard)})
139 #~~< TextBoxDisplayName >~~~~~
140 $TextBoxDisplayName = New-Object System.Windows.Forms.TextBox
141 $TextBoxDisplayName.Location = New-Object System.Drawing.Point(205, 72)
142 $TextBoxDisplayName.Size = New-Object System.Drawing.Size(398, 23)
143 $TextBoxDisplayName.TabIndex = 22
144 $TextBoxDisplayName.Text = ""
145 $TextBoxDisplayName.ForeColor = [System.Drawing.Color]::Black
146 #~~< ButtonChangedDisplayName >~~~~~
147 $ButtonChangedDisplayName = New-Object System.Windows.Forms.Button
148 $ButtonChangedDisplayName.Location = New-Object System.Drawing.Point(528, 46)
149 $ButtonChangedDisplayName.Size = New-Object System.Drawing.Size(75, 26)
150 $ButtonChangedDisplayName.TabIndex = 21
151 $ButtonChangedDisplayName.Text = "Change"
152 $ButtonChangedDisplayName.UseVisualStyleBackColor = $true
153 $ButtonChangedDisplayName.add_Click({ButtonChangedDisplayNameClick($ButtonChangedDisplayName)})
154 #~~< LabelDisplayName >~~~~~
```

User Mailbox - Windows Internet Explorer

https://mail.uvic.ca/owa/

Mario Ivanov

[Help](#)

general

- mailbox usage
- contact information
- organization
- email address
- mailbox features
- member of
- MailTip
- mailbox delegation

First name: Mario

Initials:

Last name: Ivanov

\*Name: mivanov

\*Display name: Mario Ivanov

\*Alias: mivanov

\*User logon name: mivanov @ uvic.ca

☐ Require password change on next logon

save cancel

125%

User Mailbox - Windows Internet Explorer

https://

Help

Mario Ivanov for testing

general

mailbox usage

contact information

organization

email address

mailbox features

member of

MailTip

mailbox delegation

Send As

The Send As permission allows a delegate to send email from this mailbox. The message will appear to have been sent by the mailbox owner.

+ -

DISPLAY NAME

Mario Ivanov

Send on Behalf

The Send on Behalf permission allows the delegate to send email on behalf of this mailbox. The From line in any message sent by a delegate indicates that the message was sent by the delegate on behalf of the mailbox owner.

+ -

DISPLAY NAME

Ally Chen

Full Access

The Full Access permission allows a delegate to open this mailbox and behave as the mailbox owner.

+ -

DISPLAY NAME

Ally Chen

Exchange Domain Servers

Exchange Servers

Exchange Trusted Subsystem

save

cancel

100%



# Mailbox permissions tool

## Set Mailbox permissions for Exchange admins

Mailbox: dsstesting107    Display name: Mario Ivanov for testing    Change    User: mivanov

☒ Hidden in GAL    Ticket #: BCNET

MAILBOX	allychen	Ally chen	Full Access	ADD
	mivanov	Mario Ivanov	ReadPermission	
	wclarke	Will Clarke	Full Access	
11				
INBOX	jpotton	Josh Potton	Reviewer Author	ADD
	rdraper	Ricardo Draper		
5				
SEND AS				ADD
10				
SOB	allychen	Ally chen		ADD
5				

GET    LOGS    Clipboard

Remove

Remove

Remove

Remove

## Set Mailbox permissions for Exchange admins

Mailbox	Display name	Change
dsstesting107	Mario Ivanov for testing	
<input checked="" type="checkbox"/> Hidden in GAL		Ticket # BCNET

User  
mivanov

MAILBOX

allychen	Ally chen	Full Access
mivanov	Mario Ivanov	ReadPermission
wclarke	Will Clarke	Full Access

ADD

Remove

INBOX

jpotton	Josh Potton	Reviewer
rdraper	Ricardo Draper	Author

ADD

Remove

SENDAS

--	--	--

ADD

Remove

SOB

allychen	Ally chen	
----------	-----------	--

ADD

Remove

GET

LOGS

Clipboard

mivanov is most certainly a primary address -- approval from the owner is required!

	Mailbox	Display name	Change	User
	mivanov	Mario Ivanov		
		<input type="checkbox"/> Hidden in GAL	Ticket # BCNET	
MAILBOX	rdraper	Ricardo Draper	Full Access	ADD
	wclarke	Will Clarke	Full Access	
INBOX				ADD
				Remove
SENDAS				ADD
				Remove
SUB				ADD
				Remove
GET LOGS Clipboard				



# Set Mailbox permissions for Exchange admins



mivanov is most certainly a primary address -- approval from the owner is required!

Mailbox

mivanov

Display name

Mario Ivanov

Change

User

☐ Hidden in GAL

Ticket #

M  
A  
I  
L  
B  
O  
X

ADD

Remove

I  
N  
B  
O  
X

ADD

Remove

S  
E  
N  
D  
A  
S

ADD

Remove

S  
O  
B

ADD

Remove

GET

LOGS

Clipboard

## Set Mailbox permissions for Exchange admins

	Mailbox	Display name	Change	User
	dsstesting107	Mario Ivanov for testing		
	<input checked="" type="checkbox"/> Hidden in GAL		Ticket #	
M A I L B O X	allychen	Ally chen	Full Access	ADD
	jmisovic	Jan Misovic	Full Access	
	mivanov	Mario Ivanov	Full Access	
	wclarke	Will Clarke	Full Access	
				Remove
I N B O X	rdraپر	Ricardo Draper	Author	ADD
				Remove
S E N D A S	allychen	Ally chen		ADD
	jmisovic	Jan Misovic		
	jpotton	Josh Potton		
	mivanov	Mario Ivanov		
	rdraپر	Ricardo Draper		
	wclarke	Will Clarke		
				Remove
S O B	jpotton	Josh Potton		ADD
	pdickson	Paul Dickson		
	wclarke	Will Clarke		
	allychen	Ally chen		
				Remove
GET		LOGS	Clipboard	

## Set Mailbox permissions for Exchange admins

Mailbox	Display name	Change	User
dsstesting107	Mario Ivanov for testing		
<input checked="" type="checkbox"/> Hidden in GAL		Ticket #	BCNET
M A I L B O X	allychen	Ally chen	Full Access
	jmisovic	Jan Misovic	Full Access
	mivanov	Mario Ivanov	Full Access
	wclarke	Will Clarke	Full Access
			ADD
			Remove
I N B O X	rdraper	Ricardo Draper	Author
			ADD
			Remove
S E N D A S	allychen	Ally chen	
	jmisovic	Jan Misovic	
	jpotton	Josh Potton	
	mivanov	Mario Ivanov	
	rdraper	Ricardo Draper	
	wclarke	Will Clarke	
			ADD
			Remove
S O B	jpotton	Josh Potton	
	pdickson	Paul Dickson	
	wclarke	Will Clarke	
	allychen	Ally chen	
			ADD
			Remove
GET		LOGS	Clipboard

Mailbox

gollum

Display name

Change

User

☐ Hidden in GAL

Ticket #

MAILBOX

ADD

Remove

INBOX

ADD

Remove

SENTAS

ADD

Remove

SOB

ADD

Remove

GET

LOGS

Clipboard

Non existent mailbox

An exchange mailbox gollum doesn't seem to exist

OK



# Set Mailbox permissions for Exchange admins



Mailbox

Display name

Change

User

☐ Hidden in GAL

Ticket #

M  
A  
I  
L  
B  
O  
X

ADD

Remove

I  
N  
B  
O  
X

ADD

Remove

S  
E  
N  
D  
A  
S

ADD

Remove

S  
O  
B

ADD

Remove

GET

LOGS

Clipboard

## Example

This example returns all the mailboxes that resolve from the ambiguous name resolution search on the string "Chr". This example returns mailboxes for users such as Chris Ashton, Christian Hess, and Christa Geller.

```
Get-Mailbox -Anr Chr
```

Exchange mailbox 'josh' doesn't exist. If ...

Filter

+ Add criteria ▼

NetlinkID	Display Name	Phone
User01	First Last01	1133
User02	Josh Last02	
User03	First Last03	9999
User04	First Josh04	
User05	First Last05	1333
User06	First Last06	
User07	First Last07	2222
User08	Josh Potton	1111
User09	First Last09	
User10	First Last10	
User11	First Last11	5555
User12	First Last12	
User13	First Last13	4444
User14	First Last14	3322
User15	First Last15	
User16	First Last16	
User17	First Last17	
User18	First Last18	1818

OK

Cancel

## Set Mailbox permissions for Exchange admins

Mailbox	Display name	Change	User
dsstesting107	Mario Ivanov for testing		
	<input checked="" type="checkbox"/> Hidden in GAL	Ticket #	BCNET
MAILBOX	allychen	Ally chen	Full Access
	jmisovic	Jan Misovic	Full Access
	mivanov	Mario Ivanov	Full Access
	wclarke	Will Clarke	Full Access
			ADD
			Remove
INBOX	rdraper	Ricardo Draper	Author
			ADD
			Remove
SENDER	allychen	Ally chen	
	jmisovic	Jan Misovic	
	jpotton	Josh Potton	
	mivanov	Mario Ivanov	
	rdraper	Ricardo Draper	
	wclarke	Will Clarke	
			ADD
			Remove
SUB	jpotton	Josh Potton	
	pdickson	Paul Dickson	
	wclarke	Will Clarke	
	allychen	Ally chen	
			ADD
			Remove
GET		LOGS	Clipboard

## Set Mailbox permissions for Exchange admins

Mailbox	Display name	Change	User
dsstesting107	Mario Ivanov for testing		
<input type="checkbox"/> Hidden in GAL		Ticket #	BCNET

MAILBOX

allychen	Ally chen	Full Access
jmisovic	Jan Misovic	Full Access
mivanov	Mario Ivanov	Full Access
wclarke	Will Clarke	Full Access

ADD

Remove

INBOX

rdraper	Ricardo Draper	Author
---------	----------------	--------

ADD

Remove

SENDER

allychen	Ally chen
jmisovic	Jan Misovic
jpotton	Josh Potton
mivanov	Mario Ivanov
rdraper	Ricardo Draper
wclarke	Will Clarke

ADD

Remove

SUB

jpotton	Josh Potton
pdickson	Paul Dickson
wclarke	Will Clarke
allychen	Ally chen

ADD

Remove

GET

LOGS

Clipboard



## Frequent request:

Please grant user1

**Full Access** and **Send-As** permission on the following mailboxes:

Mailbox1

Mailbox2

Mailbox3

Mailbox4

Mailbox5

Mailbox6

and remove user2 having any access on the above.

User Mailbox - Windows Internet Explorer

https://

Help

Mario Ivanov for testing

general

mailbox usage

contact information

organization

email address

mailbox features

member of

MailTip

mailbox delegation

Send As

The Send As permission allows a delegate to send email from this mailbox. The message will appear to have been sent by the mailbox owner.

+ -

DISPLAY NAME

Mario Ivanov

Send on Behalf

The Send on Behalf permission allows the delegate to send email on behalf of this mailbox. The From line in any message sent by a delegate indicates that the message was sent by the delegate on behalf of the mailbox owner.

+ -

DISPLAY NAME

Ally Chen

Full Access

The Full Access permission allows a delegate to open this mailbox and behave as the mailbox owner.

+ -

DISPLAY NAME

Ally Chen

Exchange Domain Servers

Exchange Servers

Exchange Trusted Subsystem

save

cancel

100%

## Set Mailbox permissions for Exchange admins

Mailbox	Display name	Change	User									
dsstesting107	Mario Ivanov for testing		mivanov									
<input checked="" type="checkbox"/> Hidden in GAL		Ticket #	BCNET									
M A I L B O X	<table><tr><td>allychen</td><td>Ally chen</td><td>Full Access</td></tr><tr><td>mivanov</td><td>Mario Ivanov</td><td>ReadPermission</td></tr><tr><td>wclarke</td><td>Will Clarke</td><td>Full Access</td></tr></table>		allychen	Ally chen	Full Access	mivanov	Mario Ivanov	ReadPermission	wclarke	Will Clarke	Full Access	ADD
	allychen	Ally chen	Full Access									
	mivanov	Mario Ivanov	ReadPermission									
	wclarke	Will Clarke	Full Access									
		Remove										
I N B O X	<table><tr><td>jpotton</td><td>Josh Potton</td><td>Reviewer</td></tr><tr><td>rdraper</td><td>Ricardo Draper</td><td>Author</td></tr></table>		jpotton	Josh Potton	Reviewer	rdraper	Ricardo Draper	Author	ADD			
	jpotton	Josh Potton	Reviewer									
rdraper	Ricardo Draper	Author										
		Remove										
S E N D A S			ADD									
			Remove									
S O B	<table><tr><td>allychen</td><td>Ally chen</td></tr></table>		allychen	Ally chen	ADD							
	allychen	Ally chen										
		Remove										
GET		LOGS	Clipboard									

Date and time	Operator	Mailbox	Permissions granted	To user	Ticket #
2/16/2018 12:05 PM	jpotton	dsstesting107	Edit Displayname		RT929270
2/19/2018 9:39 AM	jpotton	dsstesting107	Full Access REMOVE	jpotton	RT930024
2/19/2018 9:39 AM	jpotton	dsstesting107	Send as REMOVE	jpotton	RT930024
2/19/2018 9:40 AM	jpotton	dsstesting107	Full Access ADD	jpotton	RT930024
2/19/2018 9:40 AM	jpotton	dsstesting107	Send as ADD	jpotton	RT930024
2/19/2018 4:17 PM	mivanov	dsstesting107	Full Access REMOVE	mivanov	RT929997
2/19/2018 4:17 PM	mivanov	dsstesting107	Send as REMOVE	mivanov	RT929997
2/19/2018 4:17 PM	mivanov	dsstesting107	Send as REMOVE	mivanov	RT929997
2/19/2018 4:17 PM	mivanov	dsstesting107	Full Access REMOVE	mivanov	RT929997
2/20/2018 1:44 PM	jpotton	dsstesting107	Edit Displayname		RT930024
2/20/2018 1:45 PM	jpotton	dsstesting107	Set HIDDEN		RT930024
2/21/2018 10:11 AM	jpotton	dsstesting107	Full Access ADD	jpotton	RT930750
2/21/2018 10:11 AM	jpotton	dsstesting107	Send as ADD	jpotton	RT930750
2/21/2018 10:11 AM	jpotton	dsstesting107	Full Access REMOVE	jpotton	RT930750
2/21/2018 11:38 AM	mivanov	dsstesting107	Edit Displayname		H#179946
2/21/2018 12:12 PM	jpotton	dsstesting107	Full Access REMOVE	jpotton	H180157
2/21/2018 12:12 PM	jpotton	dsstesting107	Send as REMOVE	jpotton	H180157
2/21/2018 12:12 PM	jpotton	dsstesting107	Edit Displayname		H180157
2/21/2018 12:12 PM	jpotton	dsstesting107	Set HIDDEN		H180157
2/21/2018 12:56 PM	mivanov	dsstesting107	Inbox Permission REMOVE	mivanov	BCNET
2/21/2018 12:57 PM	mivanov	dsstesting107	Inbox Permission REMOVE	mivanov	BCNET

## Set Mailbox permissions for Exchange admins

	Mailbox	Display name	Change	User
	dsstesting107	Mario Ivanov for testing		
		<input checked="" type="checkbox"/> Hidden in GAL	Ticket # <input type="text"/>	
M A I L B O X	allychen	Ally chen	Full Access	ADD
	jmisovic	Jan Misovic	Full Access	
	mivanov	Mario Ivanov	Full Access	
	wclarke	Will Clarke	Full Access	
				Remove
I N B O X	rdraper	Ricardo Draper	Author	ADD
				Remove
S E N D A S	allychen	Ally chen		ADD
	jmisovic	Jan Misovic		
	jpotton	Josh Potton		
	mivanov	Mario Ivanov		
	rdraper	Ricardo Draper		
	wclarke	Will Clarke		
			Remove	
S O B	jpotton	Josh Potton		ADD
	pdickson	Paul Dickson		
	wclarke	Will Clarke		
	allychen	Ally chen		

Filter

+ Add criteria

date	mailbox	user	mode	ticket
2/21/2018 2:23 PM	dsstesting107	pdickson	Send on behalf ADD	BCNET
2/21/2018 2:23 PM	dsstesting107	wclarke	Send on behalf ADD	BCNET
2/21/2018 2:23 PM	dsstesting107	rdraper	Send on behalf ADD	BCNET
2/21/2018 2:24 PM	dsstesting107	jpotton	Send on behalf ADD	BCNET
2/21/2018 2:24 PM	dsstesting107	jmisovic	Full Access ADD	BCNET
2/21/2018 2:24 PM	dsstesting107		Full Access ADD	BCNET
2/21/2018 2:24 PM	dsstesting107		Full Access ADD	BCNET
2/21/2018 2:24 PM	dsstesting107		Full Access ADD	BCNET
2/21/2018 2:24 PM	dsstesting107		Full Access ADD	BCNET
2/21/2018 2:25 PM	dsstesting107	helpdesk	Full Access ADD	BCNET
2/21/2018 2:25 PM	dsstesting107		Full Access ADD	BCNET
2/21/2018 2:26 PM	dsstesting107		Send as ADD	BCNET
2/21/2018 2:26 PM	dsstesting107	rdraper	Send as ADD	BCNET
2/21/2018 2:26 PM	dsstesting107	wclarke	Send as ADD	BCNET
2/21/2018 2:27 PM	dsstesting107	jpotton	Send as ADD	BCNET
2/21/2018 2:27 PM	dsstesting107	jmisovic	Send as ADD	BCNET
2/21/2018 2:27 PM	dsstesting107		Send as ADD	BCNET
2/21/2018 2:27 PM	dsstesting107		Send as ADD	BCNET
2/21/2018 2:27 PM	dsstesting107	allychen	Send as ADD	BCNET
2/21/2018 2:28 PM	dsstesting107		Send as ADD	BCNET
2/21/2018 2:28 PM	dsstesting107		Full Access REMOVE	BCNET
2/21/2018 2:29 PM	dsstesting107		Full Access REMOVE	BCNET
2/21/2018 2:29 PM	dsstesting107		Full Access REMOVE	BCNET
2/21/2018 2:29 PM	dsstesting107		Full Access REMOVE	BCNET
2/21/2018 2:29 PM	dsstesting107	helpdesk	Full Access REMOVE	BCNET
2/21/2018 2:39 PM	mivanov	rdraper	Full Access ADD	BCNET
2/21/2018 2:39 PM	mivanov	wclarke	Full Access ADD	BCNET

OK Cancel

Mailbox permissions - Message (HTML)

FileMessageInsertOptionsFormat TextReviewTell me what you want to do...

Paste

Lucida Cor10A<sup>A</sup>

BBIU

Basic Text

Address BookCheck Names

Attach FileAttach ItemSignature

Tags

No MailTips apply.

Send

Frommivanov@uvic.ca

To...☐ UVic Computer Help Desk;

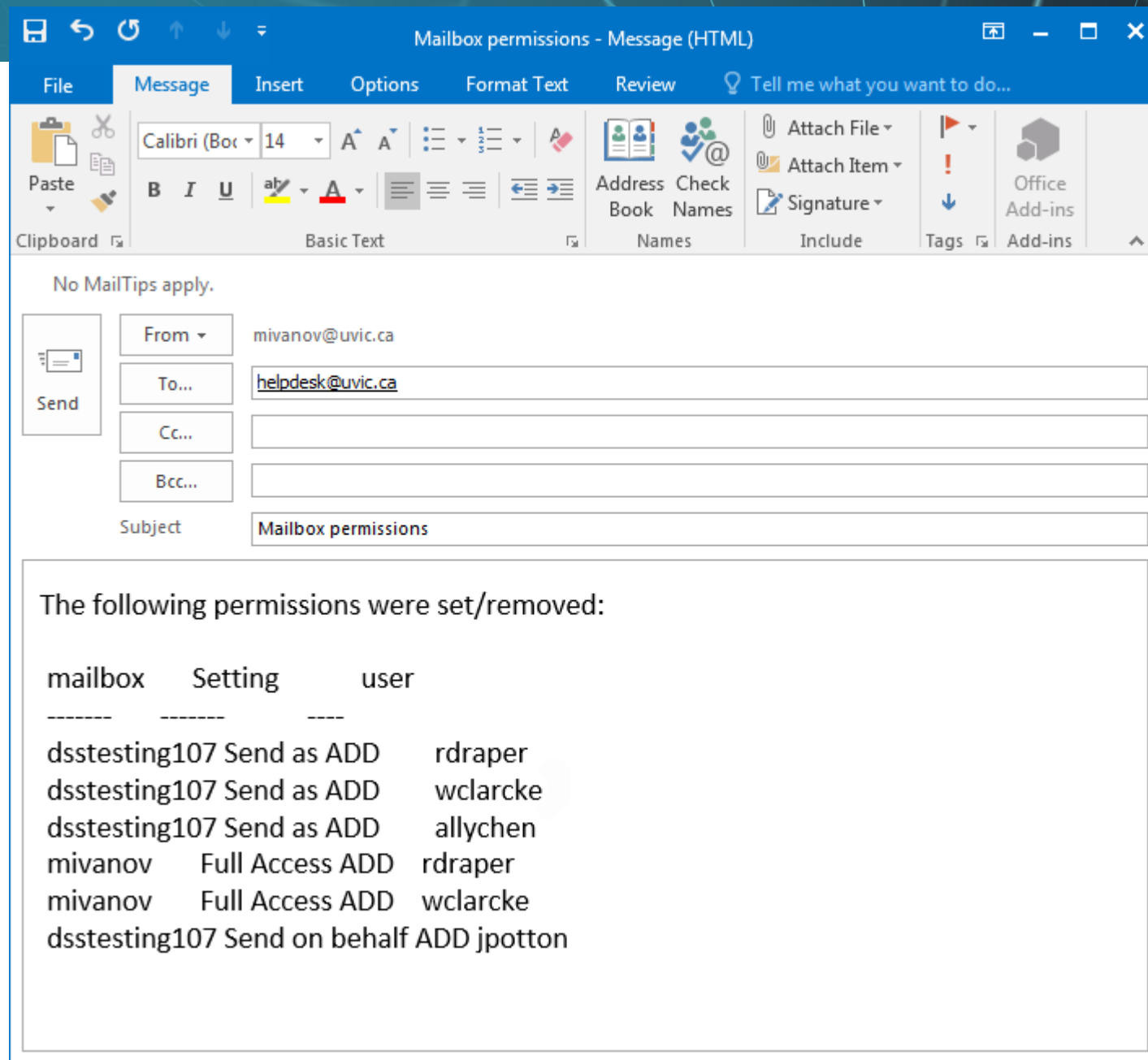
Cc...

Bcc...

SubjectMailbox permissions

The following permissions were set/removed:

mailbox	Setting	user
-----	-----	----
dsstesting107	Send as ADD	rdra <sup>per</sup>
dsstesting107	Send as ADD	wclar <sup>ke</sup>
dsstesting107	Send as ADD	ally <sup>chen</sup>
mivanov	Full Access ADD	rdra <sup>per</sup>
mivanov	Full Access ADD	wclar <sup>ke</sup>
dsstesting107	Send on behalf ADD	jpot <sup>ton</sup>



Mailbox permissions - Message (HTML)

FileMessageInsertOptionsFormat TextReviewTell me what you want to do...

Paste

Lucida Cor10A<sup>A</sup>

BBIU

Basic Text

Address BookCheck Names

Attach FileAttach ItemSignature

Tags

No MailTips apply.

Send

Frommivanov@uvic.ca

To...☐ UVic Computer Help Desk;

Cc...

Bcc...

SubjectMailbox permissions

The following permissions were set/removed:

mailbox	Setting	user
-----	-----	----
dsstesting107	Send as ADD	rdra <sup>per</sup>
dsstesting107	Send as ADD	wclar <sup>ke</sup>
dsstesting107	Send as ADD	ally <sup>chen</sup>
mivanov	Full Access ADD	rdra <sup>per</sup>
mivanov	Full Access ADD	wclar <sup>ke</sup>
dsstesting107	Send on behalf ADD	jpot <sup>ton</sup>

## Set Mailbox permissions for Exchange admins

	Mailbox	Display name	Change	User
	dsstesting107	Mario Ivanov for testing		
		<input checked="" type="checkbox"/> Hidden in GAL	Ticket # <input type="text"/>	
M A I L B O X	allychen	Ally chen	Full Access	ADD
	jmisovic	Jan Misovic	Full Access	
	mivanov	Mario Ivanov	Full Access	
	wclarke	Will Clarke	Full Access	
				Remove
I N B O X	rdraپر	Ricardo Draper	Author	ADD
				Remove
S E N D A S	allychen	Ally chen		ADD
	jmisovic	Jan Misovic		
	jpotton	Josh Potton		
	mivanov	Mario Ivanov		
	rdraپر	Ricardo Draper		
	wclarke	Will Clarke		
			Remove	
S O B	jpotton	Josh Potton		ADD
	pdickson	Paul Dickson		
	wclarke	Will Clarke		
	allychen	Ally chen		

No MailTips apply.



Send

From ▾

mivanov@uvic.ca

To...

Cc...

Subject

Mailbox Permissions on DSSTESTING107  
Display name: Mario Ivanov for testing

User	Access
allychen	Full Access
jmisovic	Full Access
mivanov	Full Access
wclarke	Full Access

Inbox permissions:

User	Access
Ricardo Draper	Author

Permissions to send:

User	Extended Rights
allychen	Send-As
jmisovic	Send-As
jpotton	Send-As
mivanov	Send-As
rdraper	Send-As
wclarke	Send-As

Send on behalf permissions:

jpotton  
pdickson  
wclarke  
allychen

```

634 function User-valid-message($name, $SoBflag) # decided to have two separate functions that validate the user and display messages.
635 {
636     $Objecttype = user-valid($name) # is the user a group, a netlinkid, a computer etc.
637
638     if ($Objecttype -eq "Exchange") {$Valid = $True}
639
640     elseif ($Objecttype -eq "group")
641     {
642         $Valid = $True
643         $ConfirmMsg = [System.Windows.Forms.MessageBox]::Show("Note that you are granting`n`rpermissions to the group:`n`n $name", "granting permissions to a group", 0)
644     }
645     elseif ($Objecttype -eq "NonExchange") {
646         # we cannot set SoB to non-exchange users
647         if ($SoBflag -eq $True)
648         {
649             $Valid = $False
650             $ConfirmMsg = [System.Windows.Forms.MessageBox]::Show("$name is a non-Exchange account. Cannot grant SoB permissions", "Granting SoB permissions", 0)
651         }
652         else { $Valid = $True }
653     }
654     elseif ($Objecttype -eq "Non Existent") {
655         $Valid = $False
656         $aliases = get-mailbox -an $name -ErrorAction SilentlyContinue | select alias, displayname, Extensions | sort alias |
657             ft -auto alias, displayname, @{ Name = "Ext" ; Expression = { $_.extensions[0] } } | Out-String
658         if ($aliases){
659             $message = "User mailbox " + """"$name"""" + " doesn't seem to exist`n`nCheck the following similar names:`n`n" + $aliases
660         }
661         else { $message = "An exchange mailbox " + $name + " doesn't seem to exist" }
662         $ConfirmMsg = [System.Windows.Forms.MessageBox]::Show($message, "Non existent mailbox", 0)
663     }
664     else { #wrong object - OU, computer etc
665         $Valid = $False
666         $ConfirmMsg = [System.Windows.Forms.MessageBox]::Show("$name is a $Objecttype!!!`n`n`nNot a good idea to`n`ngrant permissions to!", "Wrong object", 0)
667     }
668
669     return $Valid #True or False
670 }
671
672 function user-valid($user)
673 {
674     #$user=$TextBoxUser.Text
675     $UserOrGroup = Get-ADObject -filter 'samaccountname -like $user' #name->samaccountname in 2.93 works for ^ but not for earnbea
676
677     if ($UserOrGroup.objectClass -eq "user")
678     {
679         if (!(Get-Recipient $user -ErrorAction SilentlyContinue)) { $Valid = "NonExchange" }
680         else { $Valid = "Exchange" }
681     }
682     else
683     { #not a user
684         if ($UserOrGroup -eq $Null) { $Valid = "Non Existent" }
685         elseif ($UserOrGroup.objectClass -eq "group") { $Valid = "group" }

```



# Calendar permissions tool

## Set Calendar permissions

Mailbox

Ticket #

User

NetlinkID	Display name	Permissions
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	ReadItemsCreateIt
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Editor
user@mail	user@mail	Editor
user@mail	user@mail	LimitedDetails
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Availabilityonly
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Reviewer
user@mail	user@mail	Editor
user@mail	user@mail	Owner
user@mail	user@mail	Editor

Delegates: user@mail, user@mail, user@mail, user@mail

## Permissions

- ☐ Owner
- ☐ Publishing Editor
- ☒ Editor
- ☐ Publishing Author
- ☐ Author
- ☐ Contributor
- ☐ Reviewer
- ☐ None

GET

Clipboard

REMOVE

SET

HELP

LOGS

## Set Calendar permissions

Mailbox

dsstesting107

Ticket #

BCNET

User

wclarke

NetlinkID	Display name	Permissions
allychen	Ally Chen	Author
jmisovic	Jan Misovic	PublishingEditor
mivanov	Mario Ivanov	Contributor
pdickson	Paul Dickson	Owner
rdraper	Ricardo Draper	Editor
wclarke	Will Clarke	Contributor

## Permissions

- ☐ Owner
- ☐ Publishing Editor
- ☐ Editor
- ☐ Publishing Author
- ☐ Author
- ☒ Contributor
- ☐ Reviewer
- ☐ None

Delegates: allychen, jpotton, pdickson, wclarke

GET

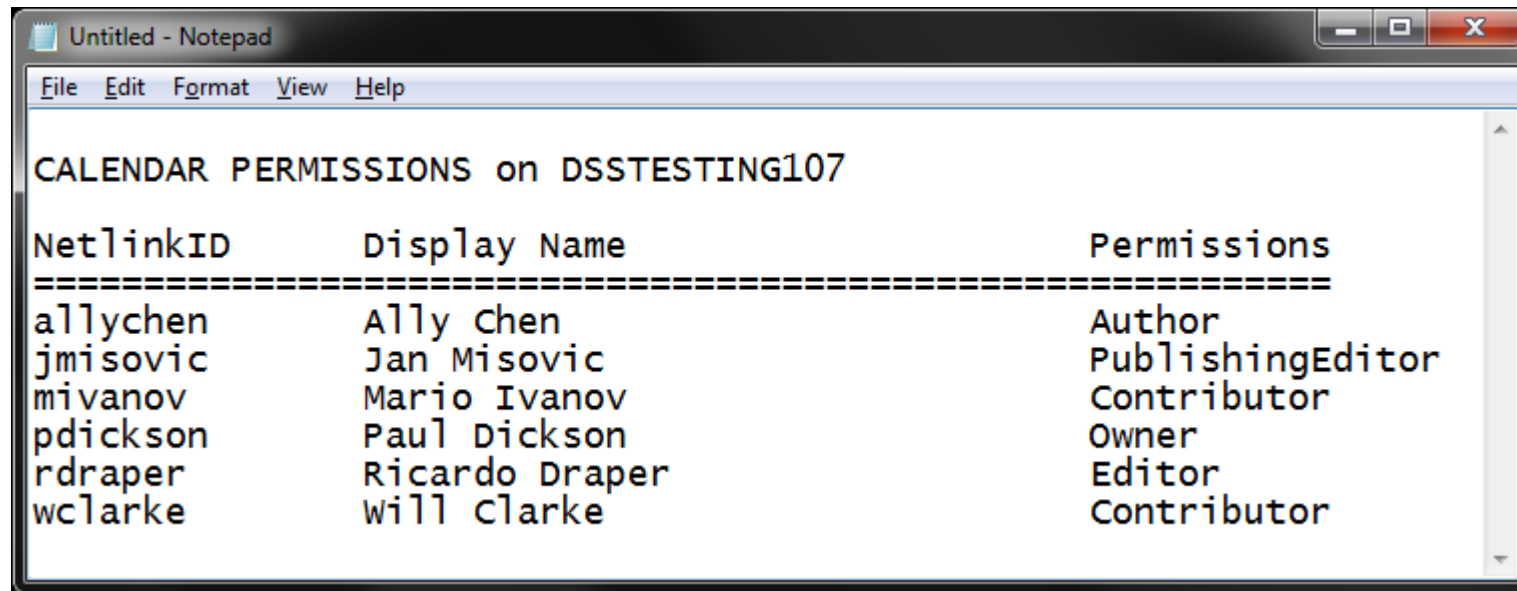
Clipboard

REMOVE

SET

HELP

LOGS



Untitled - Notepad

File Edit Format View Help

CALENDAR PERMISSIONS on DSSTESTING107

NetlinkID	Display Name	Permissions
allychen	Ally Chen	Author
jmisovic	Jan Misovic	PublishingEditor
mivanov	Mario Ivanov	Contributor
pdickson	Paul Dickson	Owner
rdraper	Ricardo Draper	Editor
wclarke	Will Clarke	Contributor

**Reviewer:** The person can view events on your calendar only. They cannot make changes to your calendar. This is the permission level to select if you don't want to grant any write or change permissions to the other person.

**Contributor:** The person can ONLY add events to your calendar, but they cannot view, modify, or delete any events on your calendar.

**Nonediting Author:** The person can create events on your calendar and view your calendar, but they can't modify any events once they have been placed on your calendar, and they can't delete any of your events.

**Author:** The person can create events on your calendar and view your calendar but cannot modify or delete any events that you have placed on your calendar. This person can modify or delete only the events they created on your calendar.

**Publishing Author:** This level of access provides the same permissions as Author but also allows the person to create subfolders.

**Editor:** The person can create, view, modify, and delete events on your calendar. This level of access effectively gives the person full read and write access to your calendar.

**Publishing Editor:** This level of access provides the same permissions as Editor but also allows the person to create subfolders.

**Owner:** The person can create, view, modify, and delete events on your calendar. As the folder owner this person will also have the ability to grant or change permissions for other people to this calendar.

OK

## Set Calendar permissions

Mailbox

dsstesting107

Ticket #

BCNET

User

wclarke

NetlinkID

Display name

Permissions

allychen	Ally Chen	Author
jmisovic	Jan Misovic	PublishingEditor
mivanov	Mario Ivanov	Contributor
pdickson	Paul Dickson	Owner
rdraper	Ricardo Draper	Editor
wclarke	will Clarke	Contributor

Permissions

- ☐ Owner
- ☐ Publishing Editor
- ☐ Editor
- ☐ Publishing Author
- ☐ Author
- ☒ Contributor
- ☐ Reviewer
- ☐ None

Delegates: allychen, jpotton, pdickson, wclarke

GET

Clipboard

REMOVE

SET

HELP

LOGS



`Set-MailboxFolderPermission -Identity dsstesting107:\calendar -User wclarke -AccessRights Editor`

Existing permission is a requirement

`Add-MailboxFolderPermission -Identity dsstesting107:\calendar -User wclarke -AccessRights Editor`

No Existing permission is a requirement

## Set Calendar permissions

Mailbox

dsstesting107

Ticket #

BCNET

User

wclarke

NetlinkID

Display name

Permissions

allychen  
jmisovic  
mivanov  
pdickson  
rdraper  
wclarke

Ally Chen  
Jan Misovic  
Mario Ivanov  
Paul Dickson  
Ricardo Draper  
Will Clarke

Author  
PublishingEditor  
Contributor  
Owner

## Existing permissions

You need to remove the existing permissions of wclarke first!

OK

Permissions

- ☐ Owner
- ☐ Publishing Editor
- ☐ Editor
- ☐ Publishing Author
- ☐ Author
- ☒ Contributor
- ☐ Reviewer
- ☐ None

Delegates: allychen, jpotton, pdickson, wclarke

GET

Clipboard

REMOVE

SET

HELP

LOGS

1/2/2018 8:29 AM	wclarke	Remove Reviewer	h176324
1/2/2018 8:29 AM	wclarke	Remove Reviewer	h176324
1/2/2018 8:30 AM	wclarke	Remove Reviewer	h176324
1/2/2018 8:30 AM	wclarke	Remove Reviewer	h176324
1/2/2018 8:31 AM	wclarke	Remove PublishingEditor	h176324
1/2/2018 8:31 AM	wclarke	Remove PublishingEditor	h176324
1/2/2018 8:32 AM	wclarke	Remove Reviewer	h176324
1/2/2018 8:32 AM	wclarke	Remove Reviewer	h176324
1/2/2018 2:06 PM	jpotton	Set Editor	H177133
1/2/2018 2:50 PM	mivanov	Set Reviewer	834850
1/2/2018 2:51 PM	mivanov	Set Reviewer	834850
1/2/2018 2:52 PM	mivanov	Set Reviewer	834850
1/2/2018 2:52 PM	mivanov	Set Reviewer	834850
1/2/2018 2:53 PM	mivanov	Set Reviewer	834850
1/2/2018 2:53 PM	mivanov	Set Editor	834850
1/2/2018 2:54 PM	mivanov	Set Reviewer	834850
1/2/2018 2:54 PM	mivanov	Set Owner	834850
1/2/2018 2:54 PM	mivanov	Set Owner	834850
1/2/2018 4:18 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:18 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:19 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:19 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:20 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:20 PM	mivanov	Remove Reviewer	834850
1/2/2018 4:20 PM	mivanov	Set Reviewer	834850
1/4/2018 10:16 AM	jpotton	Set Editor	RT837882
1/4/2018 10:17 AM	jpotton	Set Editor	RT837882
1/4/2018 10:18 AM	jpotton	Remove None	RT837882
1/4/2018 10:18 AM	jpotton	Set Editor	RT837882
1/4/2018 4:17 PM	mivanov	Remove Author	RT #839229
1/5/2018 9:01 AM	mivanov	Set Reviewer	839565



# Unified voice messaging tool

Typical request example:

**Please make ext. 8631 to forward to mailbox jpotton**

UM Mailbox - Internet Explorer

jpotton [Help](#)

▶ **UM mailbox settings**

other extensions


UM dial plan:

Extension number:

PIN status:

\*UM mailbox policy:

Personal operator extension:

 Unified Messaging is a premium feature that requires an Enterprise Client Access License (CAL). [Learn](#)

100%

[Help](#)


jpotton

Enable UM mailbox

Select a UM mailbox policy for this mailbox.

\*UM mailbox policy:

[browse...](#)

 Unified Messaging is a premium feature that requires an Enterprise Client Access License (CAL). [Learn more](#)

[next](#)[cancel](#)

[Help](#)

jpotton

## Enable UM mailbox

Specify an extension number and PIN settings for this user to access their mailbox in Outlook Voice Access.

\*Extension number (number of digits: 4):



\*PIN settings:

☒ Automatically generate a PIN

☐ Type a PIN (minimum length: 6):

☒ Require the user to reset their PIN the first time they sign in

When you click Finish, UM sends an email message that contains the PIN and the access number for Outlook Voice Access to the user.

Unified Messaging is a premium feature that requires an Enterprise Client Access License (CAL). [Learn more](#)



[Help](#)

jpotton

## Enable UM mailbox

Specify an extension number and PIN settings for this user to access their mailbox in Outlook Voice Access.

\*Extension number

8631

\*PIN settings:

☒ Automatically generate☐ Type a PIN (minimum 4 digits)☒ Require the user to enter a PIN

When you click Finish, the user will be prompted for the access number for Outlook Voice Access.

Unified Messaging requires a Client Access License (CAL). [Learn more](#)

## error

Extension 8631 is already assigned to another user on dial plan OnCampusLocals or on an equivalent dial plan.

[Click here for help...](#)

ok

back

finish

cancel

## Get/Reset Unified Voice Messaging ✕

Extension

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

---

New Mailbox

Check

Unified VM:

Release

<-- Ticket number

Reset Forwarding

---

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the list date is not recent enough, press refresh. It takes about 32 seconds to query all phone numbers and update the local cache file.

## Get/Reset Unified Voice Messaging

Extension

8631

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

New Mailbox

Check

Unified VM:

Release

<-- Ticket number

Reset Forwarding

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the list date is not recent enough, press refresh. It takes about 32 seconds to query all phone numbers and update the local cache file.

Get/Reset Unified Voice Messaging

Extension

8631

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

New Mailbox

jpotton

Check

Unified VM: 5665

Release

<-- Ticket number

Reset Forwarding

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the  
list date is not recent enough, press refresh. It  
takes about 32 seconds to query all phone  
numbers and update the local cache file.

Confirm please

Remove forwarding 8631 --> mivanov  
and  
Remove forwarding 5665 --> jpotton  
and  
Set forwarding 8631 --> jpotton

OK

Cancel

## Get/Reset Unified Voice Messaging

Extension

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

---

New Mailbox

Check

Unified VM: 5665

Release

<-- Ticket number

WAIT  
20 sec!

Reset Forwarding

---

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the list date is not recent enough, press refresh. It takes about 32 seconds to query all phone numbers and update the local cache file.

## Get/Reset Unified Voice Messaging ✕

Extension

Check

Mailbox:

Reset Pin

Display name:

Department:

---

New Mailbox

jpotton

Check

Unified VM: 8631

Release

<-- Ticket number

Reset Forwarding

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the list date is not recent enough, press refresh. It takes about 32 seconds to query all phone numbers and update the local cache file.

Get/Reset Unified Voice Messaging

Extension

8631

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

New Mailbox

Check

Unified VM:

Release

<-- Ticket number

Reset Forwarding

List file updated on:  
03/08/2018 15:42:25

Refresh  
Cache

Hint: For a quick check use the check button. If the  
list date is not recent enough, press refresh. It  
takes about 32 seconds to query all phone  
numbers and update the local cache file.

Voice only box

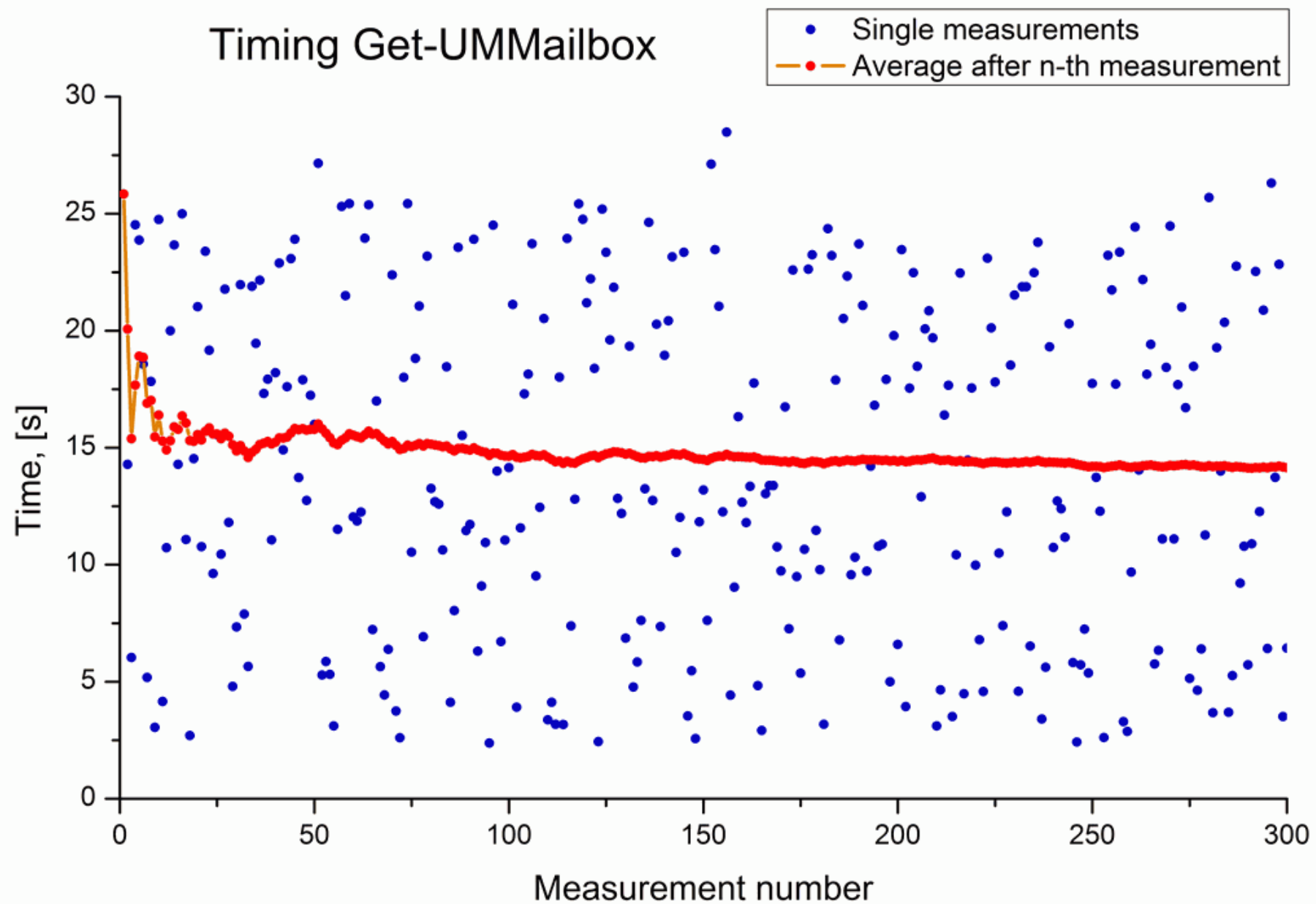
The temporary pin for the voice-only mailbox VM8631  
was copied to the clipboard so that you  
can email it to the client.

OK

```
Get-UMMailbox -ResultSize Unlimited | where {$_.Extensions -like $phone}
```

```
Get-UMMailbox -ResultSize Unlimited | where { if($_.Extensions -like $phone){$line=$_;break}}
```

```
$dummyArr=@(1)
foreach ($dummyelement in $dummyArr) {
    get-ummailbox -ResultSize Unlimited | where { if($_.Extensions -like $phone){$line=$_;break} }
}
```



## Get/Reset Unified Voice Messaging



Extension

Check

Reset Pin

Checking... Be patient!

---

New Mailbox

Check

Release

<-- Ticket number

Reset Forwarding

---

A realtime version, no cache

## Get/Reset Unified Voice Messaging



Extension

Check

Mailbox: mivanov

Reset Pin

Display name: Mario Ivanov

Department: SYST

---

New Mailbox

Check

Release

<-- Ticket number

Reset Forwarding

---

A realtime version, no cache



Set out of office message tool

Set Vacation Message for Exchange admins

☐ Out of office message enabled

GET

SAVE

Internal recipients

External recipients

Hint: If you add HTML code, strip the <html>, <body> and <br> tags.  
They will be added automatically when you click "SAVE"

HELP

Set Vacation Message for Exchange admins

X

☐ Out of office message enabled

dsstesting107

GET

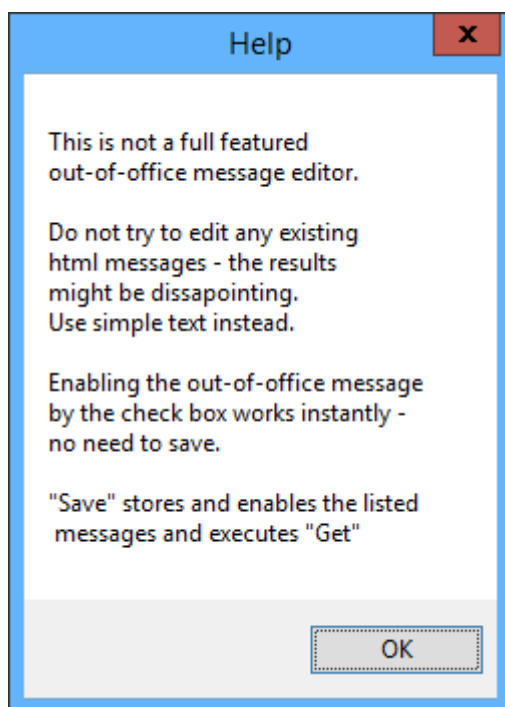
SAVE

Internal recipients

External recipients

Hint: If you add HTML code, strip the <html>, <body> and <br> tags.  
They will be added automatically when you click "SAVE"

HELP



Set Vacation Message for Exchange admins

☐ Out of office message enabled

dsstesting107 GET SAVE

Internal recipients

I am presenting at the BCNET conference in Vancouver these days. Call my cell in case of urgency.

External recipients

I am away until Friday. Please call Jan at 250- 21-6394 if you need immediate assistance. |

Hint: If you add HTML code, strip the <html>, <body> and <br> tags. They will be added automatically when you click "SAVE"

HELP

```
<html>
<body>
.....<br>
.....<br>
.....<br>
.....
</body>
</html>
```

Set Vacation Message for Exchange admins

☒ Out of office message enabled

dsstesting107

GET

SAVE

Internal recipients

I am presenting at the BCNET conference in Vancouver these days. Call my cell in case of urgency.

External recipients

I am away until Friday. Please call Jan at 250- 21-6394 if you need immediate assistance.

Hint: If you add HTML code, strip the <html>, <body> and <br> tags. They will be added automatically when you click "SAVE"

HELP

# SUMMARY

Set Mailbox permissions for Exchange admins

Mailbox: dsstesting107    Display name: Mario Ivanov for testing    User: mivanov

☒ Hidden in GAL    Ticket #: BCNET

allychen	Ally Chen	Full Access
mivanov	Mario Ivanov	ReadPermission
wclarke	Will Clarke	Full Access

ADD

MAILBOX

jpotton	Josh Potton
rdraper	Ricardo Draper

INBOX

SEND

allychen    Ally Chen

GET    LOGS

Calendar permissions tool for Exchange

Mailbox: dsstesting107

NetlinkID

allychen  
jmisovic  
mivanov  
pdickson  
rdraper  
wclarke

Delegates: allychen, jpotton, pdickson, wclarke

GET

Clipboard    REMOVE    SET

HELP    LOGS

Set Vacation Message for Exchange admins

☐ Out of office message enabled

dsstesting107    GET    SAVE

Internal recipients

I am presenting at the BCNET conference in Vancouver these days. Call my cell in case of urgency.

Hint: If you add HTML code, strip the <html>, <body> and <br> tags. They will be added automatically when you click "SAVE"

HELP

Get/Reset Unified Voice Messaging

Extension: 10031    Check

Mailbox: mivanov    Reset Pin

Display name: Mario Ivanov

Department: SYST

Work Mailbox:    Check

Unified VM:    Release

<-- Ticket number

Reset Forwarding

File updated on: 08/2018 15:42:25    Refresh Cache

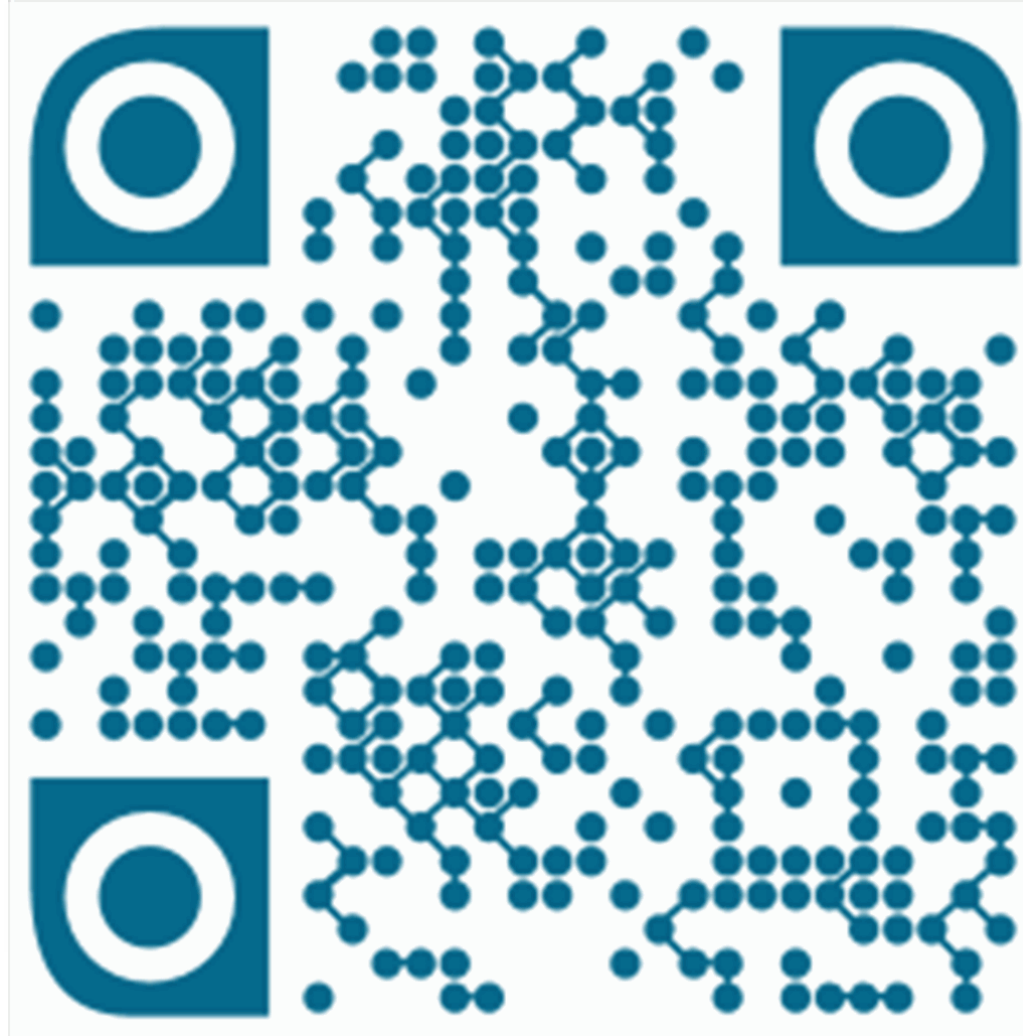
Hint: For a quick check use the check button. If the date is not recent enough, press refresh. It takes about 32 seconds to query all phone numbers and update the local cache file.

Thank you!



Thank you!

The presentation can be downloaded from here



<http://web.uvic.ca/~mivanov/BCNET/>