

3-3-5：每周巡检-统计每周邮件收发并输出HTML

作者简介

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属于实战派的讲师，具备丰富的万人规模以上企业的运维经验。课程内容侧重于实战实用。

曾垂鑫的博客地址：<http://543925535.blog.51cto.com/>

曾垂鑫的课程地址：http://edu.51cto.com/lecturer/index/user_id-639838.html

课程后续会形成完善的Windows运维工程师路线图，涵盖企业常用的Windows平台运维技术，后期课程包括但不限于AD、Exchange、Windows、System Center、Powershell、Hyper-v、Office 365等。

脚本内容

```
<#
.信息
=====
Created with: 曾垂鑫
Created on: 2017/2/24 2:12
Created by:
Organization:
Filename:检查邮件队列
=====
.DESCRIPTION
暂时没有。
#>
#导入exchange server的管理模块
Add-PSSnapin *exchange*
# 设置电子邮件配置文件

# 设置电子邮件报告的接收人
$users = "administrator@contoso.com";
#$users = "You@company.com"
#$users = "you@company.com", "manager@company.com", "etc@company.com";

#设置HTML报告初始化值

$diskReport=$null
$reportPath=$null
$reportName=$null

#HTML报告配置文件信息

# 指定输出的HTML报告的保存位置
$reportPath = "c:\PS";

# 指定输出的HTML报告的保存名称
$reportName = "\邮件收发统计$(get-date -format ddMMyyyy).html";

# 将报告保存位置和报告保存名称合并到diskreport变量
```

```
$diskReport = $reportPath + $reportName
```

```
If (Test-Path $diskReport)
{
    Remove-Item $diskReport
}
```

```
$Daysback = "-7"
```

```
$CurrentDate = Get-Date;
```

```
$DateToDelete = $CurrentDate.AddDays($Daysback);
```

```
Get-ChildItem $reportPath | Where-Object { $_.LastWriteTime -lt $DateToDelete } | Remove-Item;
```

```
# 创建并编写HTML的头部信息
```

```
$titleDate = get-date -uformat "%m-%d-%Y - %A"
```

```
$header = "
```

```
<html>
```

```
<head>
```

```
<meta http-equiv='Content-Type' content='text/html; charset=GBK'>
```

```
<title>邮件收发情况</title>
```

```
<STYLE TYPE='text/css'>
```

```
<!--
```

```
td {
```

```
font-family: Tahoma;
```

```
font-size: 11px;
```

```
border-top: 1px solid #999999;
```

```
border-right: 1px solid #999999;
```

```
border-bottom: 1px solid #999999;
```

```
border-left: 1px solid #999999;
```

```
padding-top: 0px;
```

```
padding-right: 0px;
```

```
padding-bottom: 0px;
```

```
padding-left: 0px;
```

```
}
```

```
body {
```

```
margin-left: 5px;
```

```
margin-top: 5px;
```

```
margin-right: 0px;
```

```
margin-bottom: 10px;
```

```
table {
```

```
border: thin solid #000000;
```

```
}
```

```
-->
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<table width='100%'>
```

```
<tr bgcolor='#CCCCCC'>
```

```
<td colspan='7' height='25' align='center'>
```

```
<font face='tahoma' color='#003399' size='4'><strong>邮件收发情况巡检报告 for $titledate</strong></font>
```

```
</td>
```

```
</tr>
```

```
</table>
```

"

#将HTML头部信息追加到diskreport里面

Add-Content \$diskReport \$header

创建并编写HTML报告的表格头部

\$tableHeader = "

<table width='100%'><tbody>

<tr bgcolor=#CCCCCC>

<td width='15%' align='center'>星期</td>

<td width='15%' align='center'>日期</td>

<td width='15%' align='center'>发送数量</td>

<td width='5%' align='center'>发送大小 (GB) </td>

<td width='15%' align='center'>接收数量</td>

<td width='10%' align='center'>接收大小 (GB) </td>

</tr>

"

#将表格头部信息追加到diskreport

Add-Content \$diskReport \$tableHeader

下面是统计本周邮件收发的脚本正文部分，定义变量的初始值

\$ErrorActionPreference = "SilentlyContinue"

\$tab2 = \$null

\$tabInfo = \$null

\$dataRow = \$null

\$strEmails1 = \$null

[String]\$strEmails2 = \$null

[String]\$strEmails = \$null

[Int64]\$intSent = \$intRec = 0 #定义发送数量和接收数量的初始值为0

[Int64] \$intSentSize = \$intRecSize = 0 #定义发送大小和接收大小的初始值为0

#定义邮件收发的统计周期

\$From = (Get-Date).AddDays(-7) #统计过去几天的收发情况

\$To = \$From.AddDays(1)

Write-Host "DayOfWeek,Date,Sent,Sent Size (GB),Received,Received Size (GB)" -ForegroundColor Yellow

Do

{

#创建保存每日邮件收发数量的变量

#定义日期格式

\$strEmails1 = "\$(\$From.DayOfWeek),\$(\$From.ToShortDateString())," #定义日期格式

[String]\$strEmails = "\$(\$From.DayOfWeek)"

[String]\$strEmails2 = "\$(\$From.ToShortDateString())"

[Int64]\$intSent = \$intRec = 0 #定义发送数量和接收数量的初始值为0

[Int64] \$intSentSize = \$intRecSize = 0 #定义发送大小和接收大小的初始值为0

#统计邮件每日收发总数的命令部分

Get-TransportService | `

```

Get-MessageTrackingLog -ResultSize Unlimited -Start $From -End $To | ForEach {
    # 发送邮件情况
    If ($_.EventId -eq "RECEIVE" -and $_.Source -eq "STOREDRIVER")

    {
        $intSent++
        $intSentSize += $_.TotalBytes
    }

    # 接收邮件情况
    If ($_.EventId -eq "DELIVER")
    {
        $intRec += $_.RecipientCount
        $intRecSize += $_.TotalBytes
    }
}

$intSentSize = [Math]::Round($intSentSize/1GB, 0)
$intRecSize = [Math]::Round($intRecSize/1GB, 0)

#屏幕直接输出
$strEmails1 += "$intSent,$intSentSize,$intRec,$intRecSize"
$strEmails1

$tab2 = "
<tr>
<td width='15%' align='center'>$strEmails</td>
    <td width='15%' align='center'>$strEmails2</td>
    <td width='15%'>$intSent</td>
<td width='20%' align='center'>$intSentSize</td>
<td width='15%'>$intRec</td>
<td width='20%' align='center'>$intRecSize</td>
</tr>
"
Add-Content $diskReport $tab2

$From = $From.AddDays(1)
$To = $From.AddDays(1)
}

While ($to -lt (Get-Date))
#停止条件

# 报表结尾
$tableDescription = ""
Add-Content $diskReport $tableDescription
Add-Content $diskReport "</body></html>"

# 如果diskreport报表不为空的话，则发送电子邮件

```

```

if ($diskReport -ne "")
{
    foreach ($user in $users)
    {
        Write-Host "正在发送电子邮件通知到 $user"

        $smtpServer = "172.168.1.10"
        $smtp = New-Object Net.Mail.SmtpClient($smtpServer)
        $msg = New-Object Net.Mail.MailMessage
        $msg.To.Add($user)
        $msg.From = "PScript@contoso.com"
        $msg.Subject = "[系统组每周巡检]本周邮件收发情况报告 for $titledate"
        $msg.IsBodyHTML = $true
        $msg.Body = get-content $diskReport
        $smtp.Send($msg)
        $body = "磁盘巡检情况"
    }
}

```

执行结果


1) 屏幕输出

```

DayOfWeek, Date, Sent, Sent Size (MB), Received, Received Size (MB)
Friday, 2017/4/14, 287, 0, 0, 0
Saturday, 2017/4/15, 288, 0, 0, 0
Sunday, 2017/4/16, 288, 0, 0, 0
Monday, 2017/4/17, 288, 0, 0, 0
Tuesday, 2017/4/18, 288, 0, 0, 0
Wednesday, 2017/4/19, 288, 0, 0, 0
Thursday, 2017/4/20, 288, 0, 3, 0
正在发送电子邮件通知到 administrator@contoso.com

```

2) 邮件输出HTML

 [系统组每周巡检]本周邮件收发情况报告 for 04-21-2017 - 星期五

邮件收发情况巡检报告 for 04-21-2017 - 星期五					
星期	日期	发送数量	发送大小 (GB)	接收数量	接收大小 (GB)
Friday	2017/4/14	287	0	0	0
Saturday	2017/4/15	288	0	0	0
Sunday	2017/4/16	288	0	0	0
Monday	2017/4/17	288	0	0	0
Tuesday	2017/4/18	288	0	0	0
Wednesday	2017/4/19	288	0	0	0
Thursday	2017/4/20	288	0	3	0

扩展内容

PowerShell-Exchange : 统计每天邮件收发 - 曾垂鑫的技术专栏 - 51CTO技术博客

<http://543925535.blog.51cto.com/639838/1745720>