

Creating HTML Reports with Style

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PowerShell HTML Basics

- You must read help and examples for ConvertTo-HTML
- Style done with CSS
- Only convert the data that you need
- Use html fragments
- Append or prepend text to incorporate other information

Using HTML fragments

- Parse HTML for customizations
 - Simple string replacements
 - Regular Expressions
 - DOM

-Fragment

-As

- Table*
- List

Do it with style

Use CSS file

- Test browser compatibility
- Good for published reports
- Chrome display problem? First line = `@charset "UTF-8";`

Embed style in the header

- Read from CSS file
- Use a here-string

Options

- Alternate row shading
- Conditional formatting
- Embedded images
- javascript

Alternate Rows

- Often used with tables
- Define a row background color

Drive	Volume	Compressed	SizeGB	FreeGB	PercentFree
C:		False	454	232.5355	51.2233434898349
D:	VM	False	112	39.9798	35.7639105839276
E:	Big_T	False	932	350.1866	37.5934046425744
F:	TOSHIBA EXT	False	932	551.4688	59.2015483880416
G:	Extra_Data	False	466	192.8701	41.4098663500259

```
<style>
body { background-color:#FFFFFF;
      font-family:Tahoma;
      font-size:12pt; }
td, th { border:1px solid black;
         border-collapse:collapse; }
th { color:white;
     background-color:black; }
table, tr, td, th { padding: 2px; margin: 0px }
tr:nth-child(odd) {background-color: lightgray}
table { margin-left:50px; }
</style>
```

Conditional Formatting

Define
conditional
style as a
class

Convert to
HTML

Parse
HTML and
insert class

```
[xml]$html = $drives | ConvertTo-Html -fragment
```

Conditional Formatting

Define
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Convert to
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Parse
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```
<Title>Disk Drive Report</Title>
<style>
body { background-color:#FFFFFF;
      font-family:Tahoma;
      font-size:12pt; }
td, th { border:1px solid black;
         border-collapse:collapse;
         }
th { color:white;
     background-color:black; }
table, tr, td, th { padding: 5px; margin: 0px }
table { margin-left:50px; }
.danger {background-color: red}
.warn {background-color: yellow}
</style>
```

Conditional Formatting

Define
conditional
style as a
class

Convert to
HTML

Parse
HTML and
insert class

```
for ($i=1;$i -le $html.table.tr.count-1;$i++) {  
    $class = $html.CreateAttribute("class")  
    #check the value of the last column and assign a class  
    if (($html.table.tr[$i].td[-1] -as [int]) -le 36) {  
        $class.value = "danger"  
        $html.table.tr[$i].Attributes.Append($class) | Out-Null  
    }  
    elseif (($html.table.tr[$i].td[-1] -as [int]) -le 50) {  
        $class.value = "warn"  
        $html.table.tr[$i].Attributes.Append($class) | Out-Null  
    }  
}
```


Embedding Images

Referencing images by URL handy for intranet reports

Embed images to make files portable

Great for sending via email

Convert to base 64

- `$ImageBits = [Convert]::ToBase64String((Get-Content $imagefile -Encoding Byte))`

Insert stream as image source

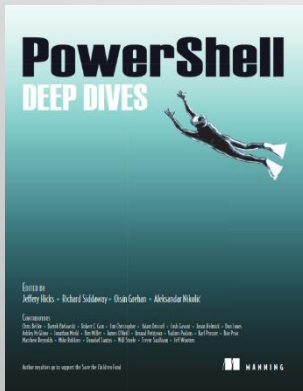
- `$ImageHTML = ""`

HTML PowerShell Report Techniques



Resources

- The Lonely Administrator (<http://jdhitsolutions.com/blog>)
- PowerShell Deep Dives (ed. Jeffery Hicks)
- Creating HTML Reports in PowerShell by Don Jones
- PowerShell in Depth by Don Jones, Richard Siddaway & Jeffery Hicks
- <http://PowerShell.org>



Questions & Answers



Thank You



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