

WELCOME TO TECH | IMMERSION

Windows PowerShell and Custom Property Stuff

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Customize Data Output with Calculated Properties

- What are calculated/custom properties (“columns”)?
- Making the hashtable for a calculated property
- A bevy of examples

What Are They?

- PowerShell has the ability to dynamically extend objects
- Adding a **NoteProperty** lets you attach custom information to an object
- Do this to...
 - Create custom displays
 - Align pipeline output and input for parameter binding

Making the Hashtable

```
@{  
    name='whatever';  
    expression={$_.whatever}  
}
```

- Name can also be Label
- Shorten with “n” (or “l”) and “e” for brevity
- Each @hashtable is an element; include multiple elements in a comma-separated list

The Trick

- Within the expression {scriptblock}, \$_ is a placeholder for whatever object was piped to Select, FT, or FL
- Use \$_.whatever to access properties and methods of that object
- This makes slightly more sense in an example. Coming right up.

Use With What?

- Use with...
 - Select-Object (Select)
 - Format-List (FL)
 - Format-Table (FT)

Examples, Examples, Examplicii

- Calculating free disk percentage
- Performing a second WMI query
- Changing “name” to “computername” for parameter binding
- Fixing columns in a CSV for AD user creation

ADVANCED TIME!

- Hashtable also accepts...
 - FormatString
 - Width
 - Alignment (Left, Center, Right)
- FormatString is useful anywhere; the other two only with Format-Table

More Examples

- Making disk space look prettier (commas!)
- Aligning and controlling column width more precisely
- FormatString uses same stuff as `-f` operator

The background of the slide is a deep blue underwater scene. Sunlight rays penetrate from the surface, creating a shimmering, ethereal effect. The rays are most prominent in the upper left and center, fading towards the bottom right. The overall mood is serene and professional.

Thank you.