



Take Your Task Sequences to the Next Level

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Imaging Overview



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Thick Imaging Solutions

- Ghost, FOG, etc
- Significant storage needed
- Less remote capabilities
- SysPrep not as effective
- Cumbersome to update images
- Hardware dependent
- No granular customization

SCCM Task Sequences

- Centralized and standardized storage
- PXE with unattended deployment
- Real-time driver recognition
- Individualized updating
- Scripting and logic in sequences

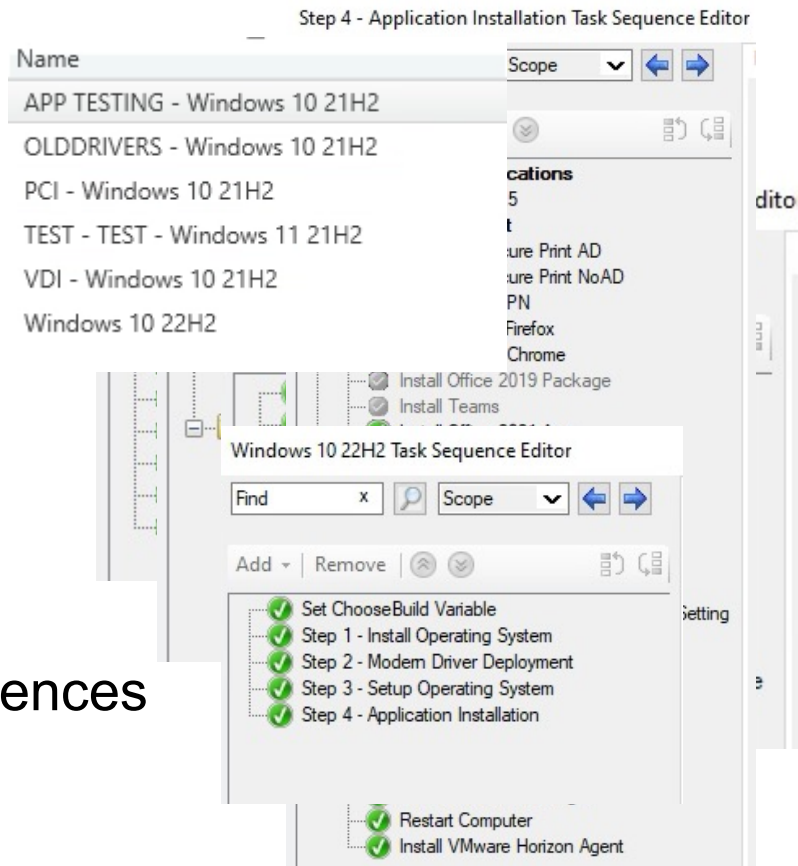
Object-Oriented Sequencing



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Nested Sequences

- Organize based on task
 - Install Operating System
 - Driver Management
 - Setup Operating System
 - Install Software
- Plug into multiple master sequences
- Swap out easily

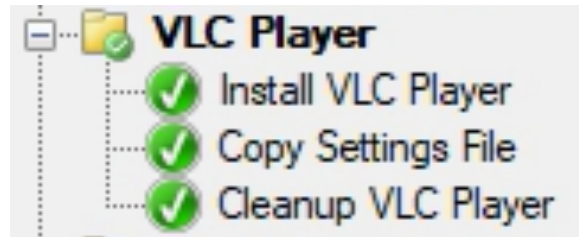


Master Sequences

- One “Master” sequence called by various starter sequences
 - Zero-Touch
 - Interactive
 - Testing
 - Testing new Windows builds
 - Unique solutions
 - Problematic
- Testing is done on production sequences
- Only update one sequence

Software Installation

- Individual groups
 - Swap in/out and easily disable temporarily
 - Use logic and conditions to run or skip
 - Scripting to determine and check for conditions
- Standard steps
 - Install Software
 - Configure Software
 - Cleanup Software



Test Sequence Groups

- Copying sequences
 - End up with many duplicated sequences
 - New branch for each duplication
 - More than one control changes
 - Higher level changes need redone in each test sequence
 - End up outdated
- Test group in the sequence depending on conditions

Using Conditions



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Setting Conditions

- Collection membership
- Set by starter sequences
- Querying hardware or other device items
 - Chassis Type (Laptop vs Desktop)
 - Manufacturer
 - IP Address
 - Virtual Machines
- Scripting
 - Interactive
 - External inputs

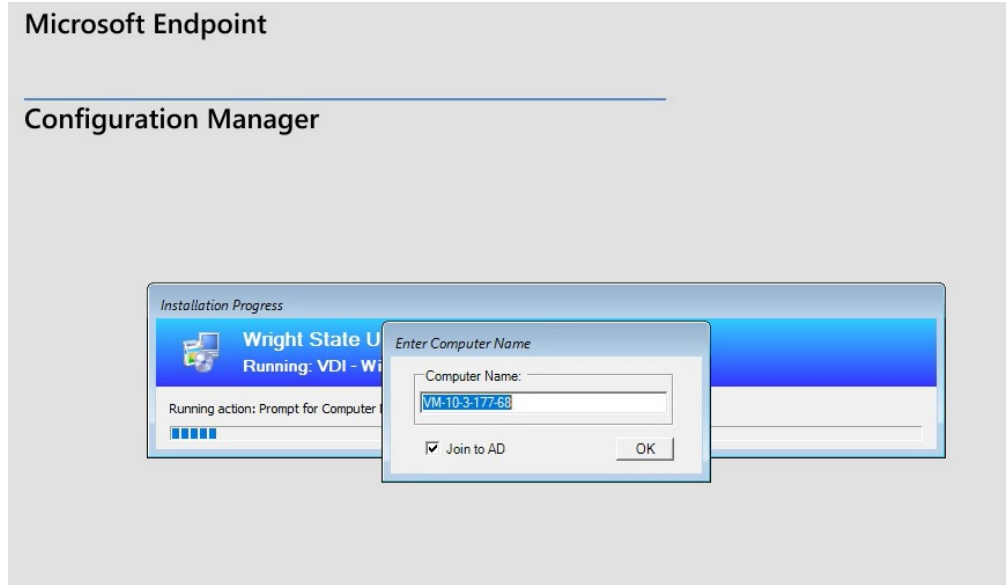
Scripting



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Desktop Machines

- Some variance
- Always interactive
- Query Hardware
- Prompt for variables
 - Naming
 - Domain



Labs & Classroom Machines

- Hundreds of machines
- Infinite combination of configurations
 - Ever-changing by frequent requests
- Zero-Touch bulk imaging required
 - Also On-Demand singles
- Easy to specify options
 - Outside SCCM if possible

Labs: “The Spreadsheet”

- Stored on regular shared space
 - Multiple users – both campuses
- Macros
 - Save as a copy
 - Save as csv
- Clearly structured organization
- Binary (Yes/No) options
 - Some multiple responses

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	Lab	Notes	DeepFreeze	Microsoft Office	2019	CTS Screensaver	Google Chrome	Mozilla Firefox	Pharos Student	VLC Player	WebEx Meetings	Adobe Reader	Acrobat Pro DC	Adobe AfterEffects	Adobe Animate
2	Variable		deepfreeze001	office001	creensaver	chrome	firefox	Dayton Secure	secureprint	vlc	webex	acrobatreader	acrobatdc	aftereffects	animate
3	License		Site	Site	None	Open	Open	None	Open	Open	Open	Open	Site	Seat Count	Seat Count
4	DL240	STAC	ULSTAC	alloffice		X	X	X	X	X	X	X	X	X	X
5	LX040H	Frank Wolz Test	ULMain	stacoffice		X	X	X	X	X	X	X	X	X	X
6	vm-10-3-177-68	Frank Wolz Test	None	alloffice		X									
7	SPARELL02	cts test	df batch20	alloffice	X	X	X	X	X	X	X	X			
8	CTLRcRm	CTL recording PC	None	alloffice	X	X	X	X	X	X		X			
9	UL-PARENT	VDI Test Frank	None	alloffice		X	X	X	X	X	X	X	X		
10	DELL-SP-187116	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
11	Dellingpc		df batch20	alloffice	X	X	X	X	X	X	X	X			
12	SCCKO	55C Student check	None	alloffice	X	X	X	X	X	X	X	X			
13	2555	south campus	df batch20	alloffice	X	X	X	X	X	X	X	X			
14	EC-Dell-SP01		df batch20	alloffice	X	X	X	X	X	X	X	X			
15	EC-AL	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
16	EC-CA	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
17	EC-BL	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
18	EC-BS	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X	X		
19	EC-HS	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
20	EC-HH	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
21	EC-FH	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
22	EC-MH025-INST	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
23	EC-MH031-Inst	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
24	EC-MH037-Inst	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
25	EC-MH043-INST	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
26	EC-MH047-INST	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
27	EC-MH244-187127	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
28	LAB-MH295-INST	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
29	EC-MM	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
30	EC-MS	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
31	EC-MH	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
32	EC-OH	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
33	EC-RK	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
34	EC-RC	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
35	EC-UH	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
36	EC-WH	classroom Group	DF-SOM batch20	alloffice	X	X	X	X	X	X	X	X			
37	EC-SC009	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
38	EC-ALL126		None	None											
39	EC-RP4-187109	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
40	LAB-AH131	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
41	EC-OH112-187057	classroom Group	df batch20	alloffice	X	X	X	X	X	X	X	X			
42	EC-RK058		None	None											
43	LCTEST	Lake Test	None	None											
44	DH102	Dwyer Hall 102 Cor	Lake-df-TS-batch	alloffice		X	X	X	X	X	X	X	X		
45	CR-RP4		df batch20	alloffice	X	X	X	X	X	X	X	X			
46	NCMR	Calamityville	df batch20	alloffice	X	X	X	X	X	X	X	X			
47	PORT	Portable Laptop Ca	df batch20	alloffice	X	X	X	X	X	X	X	X			
48	AN182	LC SCC	Lake-df-TS-batch	alloffice	X	X	X	X	X	X	X	X	X		

Labs: Spreadsheet Elements

- Rows to correspond to name of machine
- Columns for each application
- Each application has a “variable” field
 - Corresponds to conditions in the Task Sequence
- Notes and license info

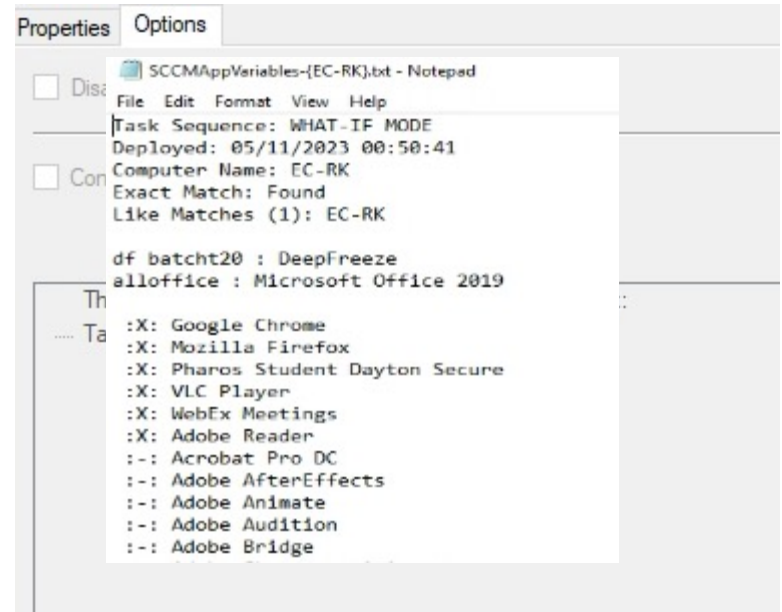
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22	EC-MH025-INST	classroom Group	df batch20	alloffice	X	X
23	EC-MH031-Inst	classroom Group	df batch20	alloffice	X	X
24	EC-MH037-Inst	classroom Group	df batch20	alloffice	X	X
25	EC-MH043-INST	classroom Group	df batch20	alloffice	X	X
26	EC-MH047-INST	classroom Group	df batch20	alloffice	X	X

Labs: Spreadsheet to SCCM Script

- Lookup rows based on computer name
- Conflict resolution
 - EXACT match or LIKE match
- Create variable if an X exists
 - Set variable for the non-binary items

Labs: Script Results

- Create variables for use in conditions
- Create debug file on C drive with results
- Also “What-If” manual run



The screenshot shows a Notepad window titled "SCCMAppVariables-{EC-RK}.txt - Notepad" with a menu bar (File, Edit, Format, View, Help). The text content is as follows:

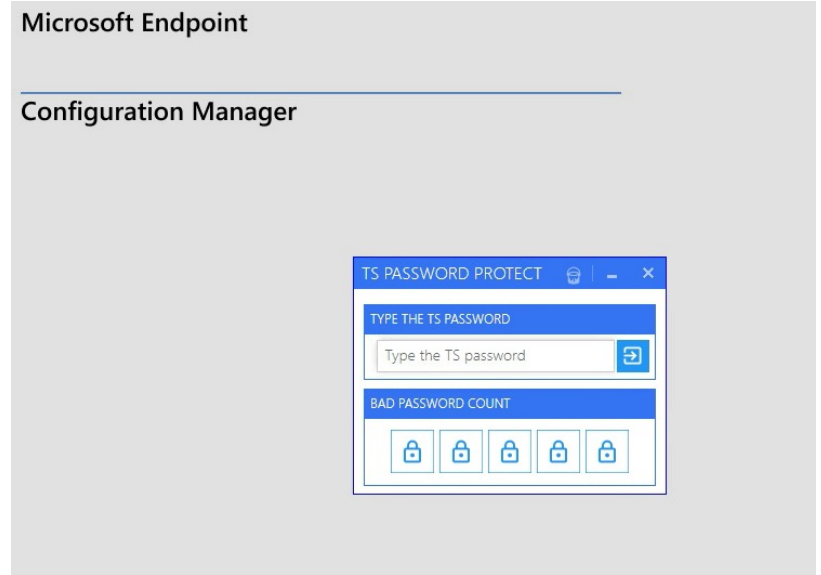
```
Task Sequence: WHAT-IF MODE
Deployed: 05/11/2023 00:50:41
Computer Name: EC-RK
Exact Match: Found
Like Matches (1): EC-RK

df batcht20 : DeepFreeze
alloffice : Microsoft Office 2019

Th
.... Ta
: X: Google Chrome
: X: Mozilla Firefox
: X: Pharos Student Dayton Secure
: X: VLC Player
: X: WebEx Meetings
: X: Adobe Reader
: -: Acrobat Pro DC
: -: Adobe AfterEffects
: -: Adobe Animate
: -: Adobe Audition
: -: Adobe Bridge
```

Password Protect Script

- Password PXE at the DP level
- Password PXE at the BIOS level
- No password
 - Worst case: lose data
 - Best case: system unavailable
- Not for “Security”



Future Plans



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Future Plans

- Reconcile issues caused by October and March updates
- Eliminate more manual intervention
 - Add accounts to local admins
 - Bitlocker encryption
- Windows 11
- Better conflict resolution on the spreadsheet
- Coauthoring on the spreadsheet.....Web-Based??

Questions??



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