

CA Chorus Software Manager User Experience at Verizon Session 15601

August 6, 2014



Agenda

- Verizon Environment
- Verizon software distribution methodology
- CSM Installation History at Verizon
- Where we see value in CSM
- Recommendations
- Surprises Perhaps
- Summary



Verizon Environmentals

- zSeries Environment
 - 5 Data Centers
 - 16 Sysplexes, 7 sandbox or test, 9 production
 - 110+ LPARs
 - 230k Active MIPS
 - 75+ CA products and sub products
- CSM Environment
 - CSM 6.0
 - Installed on systems programmer sandbox only
 - Used for z/OS based products, IDMS and Datacom
 - Only used for product installation and maintenance. Configuration and deployment are accomplished via an internal process



Software Distribution Methodology

- Install once, distribute many
 - All zSeries software is installed in software "warehouse" on our sandbox system by the product developer
 - After installation (RECEIVE APPLY) software is included in our build process to create an executable version of the software
 - SMP environment copied from the "warehouse" version to an execution environment
 - All executable software resides on the two sysres volumes
- Quarterly software distributions
 - Follows the IBM quarterly RSU calendar
 - Each quarterly RSU is a complete replacement for all prior RSUs
 - Products that have not had any maintenance applied are included in the quarterly distribution as well as products that have had maintenance applied
 - Distributed the month after the IBM quarterly RSU becomes available
 - Takes roughly 8 weeks to roll a distribution through all test and production systems
 - IBM monthly RSU, weekly HIPERs and PEs are downloaded and installed by one person.
 - OEM products are maintained by the developer as maintenance becomes available from the vendor



CA CSM at Verizon

- June 2010: Install MSM 2.0
 - Configured for use our sandbox system
 - Limited use, poor performance,
- February 2011: Installation of CSM 3.1
 - New product install (separate CSI, separate filesystem)
 - Difficult to migrate the configuration from one release to another
 - Confusing methods to download maintenance
 - Reimport of all managed CSIs
- May 2012: Upgrade to CSM 4.1
 - New install, configuration migration no better than the 2.0 3.1 migration
 - Better performance for smaller CSIs, performance for large CSI still abysmal
 - Used primarily for maintenance installation in single product CSIs
- May 2013: Upgrade to CSM 5.1
 - New install, configuration still overly complicated
 - Required help from CA to migrate configuration from 4.1 to 5.1
 - Performance on large CSI no better, fractionally better for smaller CSIs
- May 2014: Upgrade to CSM 6.0
 - Performance markedly improved for large CSI via "zone sets"
 - CA RS Wizard provides good functionality

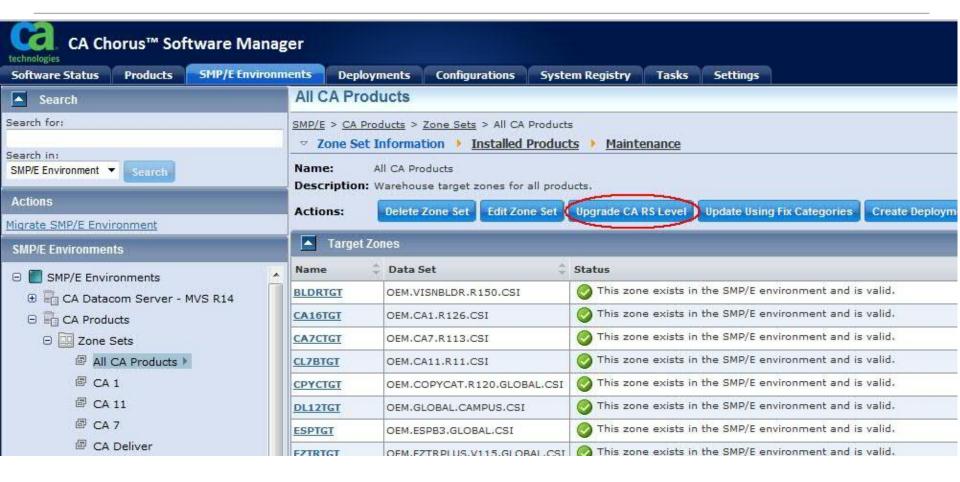


CSM's Value

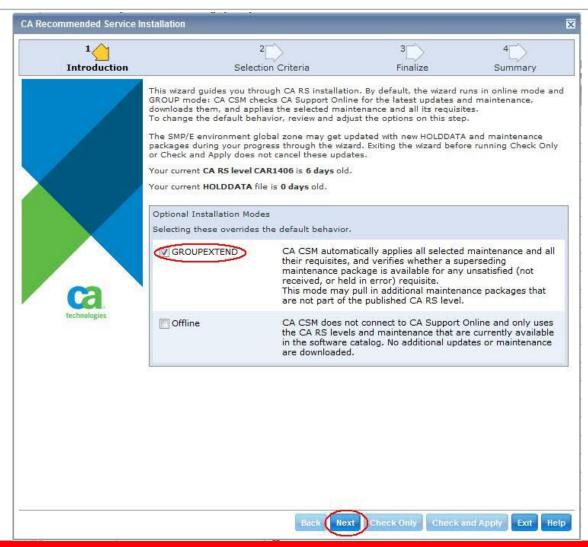
- Previously used CAMPUS
 - CAMPUS was a CA offering that packaged maintenance for all CA products on a semi annual basis.
 - One developer downloaded and installed the CAMPUS tape maintaining all of the products in a single event.
 - New product releases could be included with CAMPUS; we did maintenance only installs.
 - CAMPUS was discontinued several years ago leaving the burden of regular maintenance to the developer
- CARS
 - CA's monthly maintenance package similar to IBM's monthly RSU
 - Packages CA tested and certified maintenance
- CSM
 - Allows the application of CARS maintenance via the UPGRADE CA/RS LEVEL function
 - Can span multiple products and multiple zones
- Marriage of CA RS and CSM gets us back to one developer maintaining multiple products in a single event



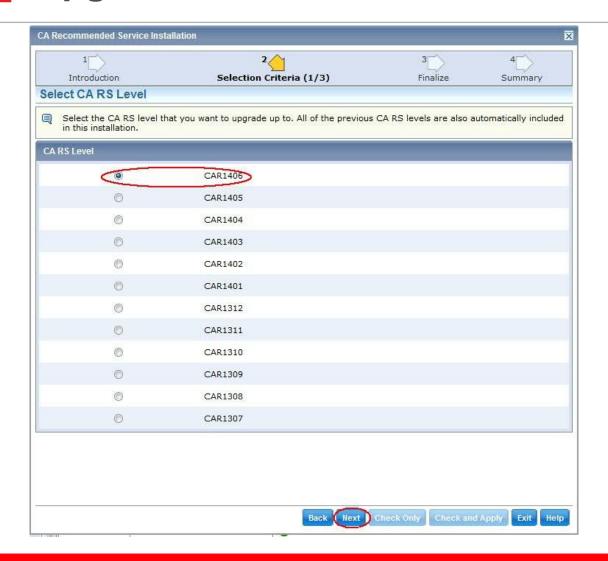
Upgrade CARS Maintenance Level







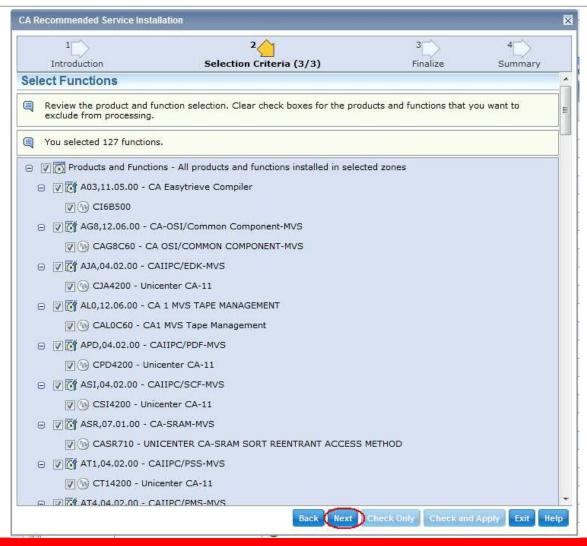




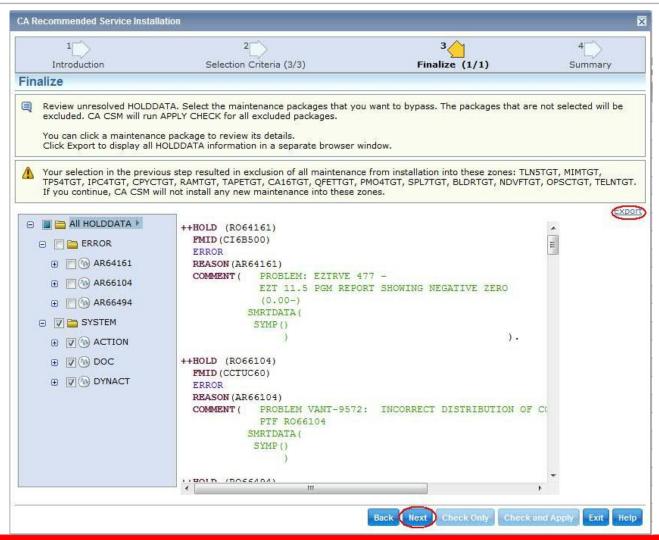




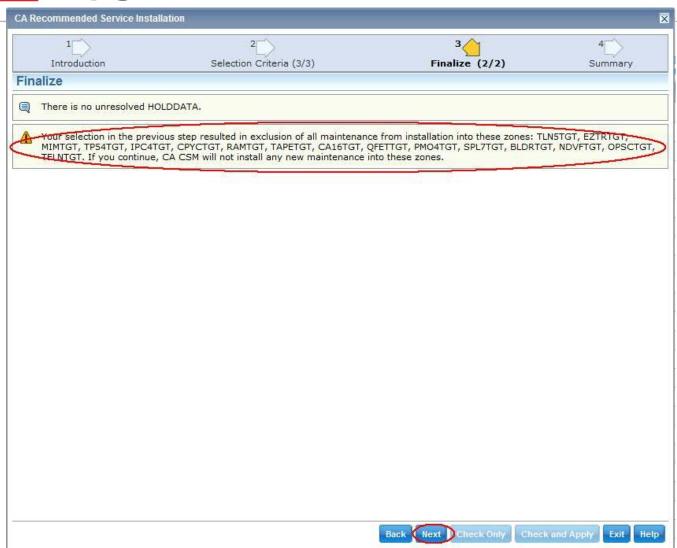


















Recommendations

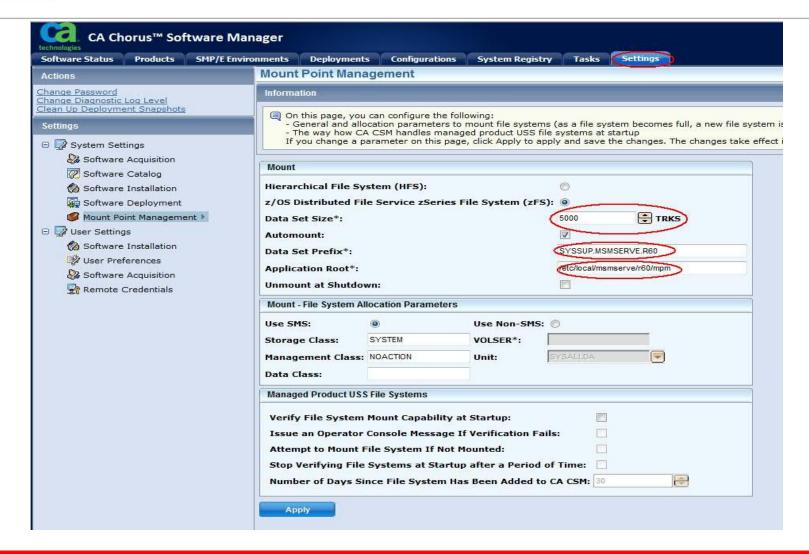


Migrate to CSM 6.0

- Install 6.0, then migrate all CSIs into CSM
 - We ran 6.0 and 5.1 in parallel for several months. There are no issues updating the same CSI from both releases of CSM
 - The upgrade process seemed messy and so we just remigrated all our CSIs
 - Allows for a much needed cleanup of the prior release filesystems
 - You do lose access to task output from work done with prior releases unless you upgrade
- Improved performance
 - Overall better performance than 5.1 even for large CSIs
 - Performance further improved for large CSIs (over 100 zones) using Zone Sets
- Installed products listed by name rather than arcane 3 letter codes
- Improved CARS and maintenance wizards
- Automatic maintenance download and receive function

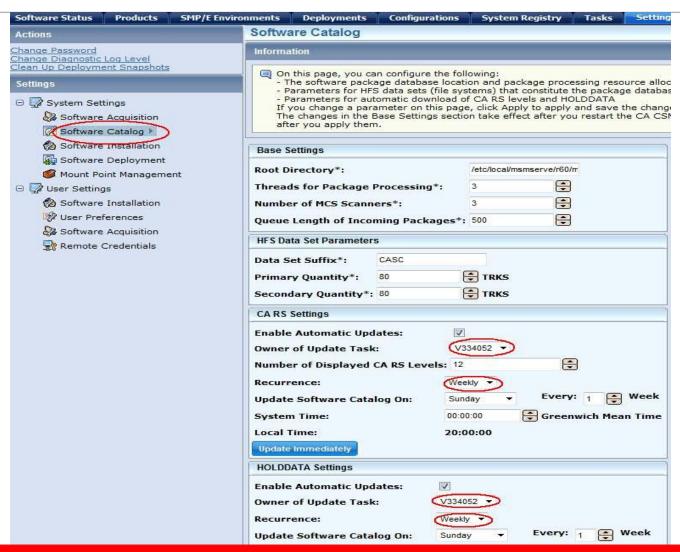


Specify Adequate Download Size





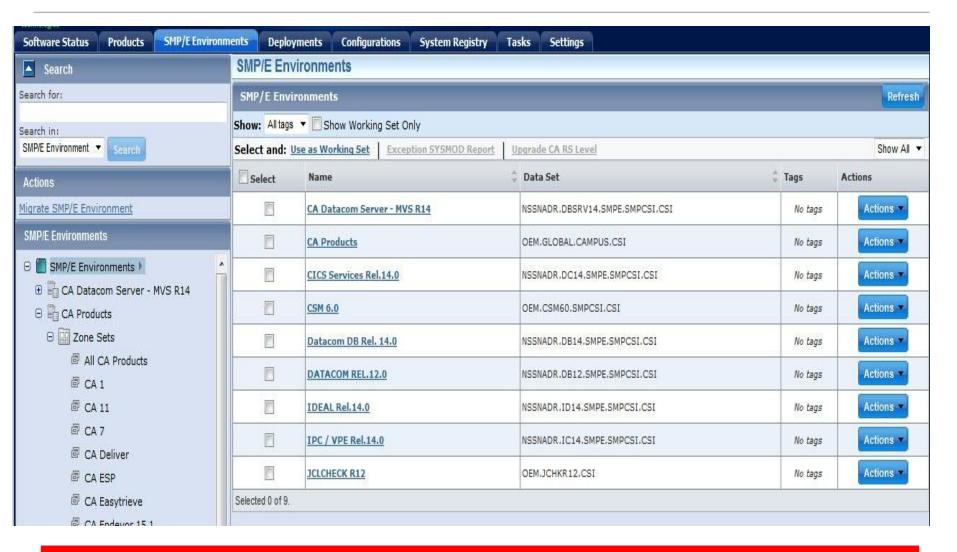
Download HOLDDATA and CARS Weekly



Verizon IT Cloud Services – Powerful Answers Every Day

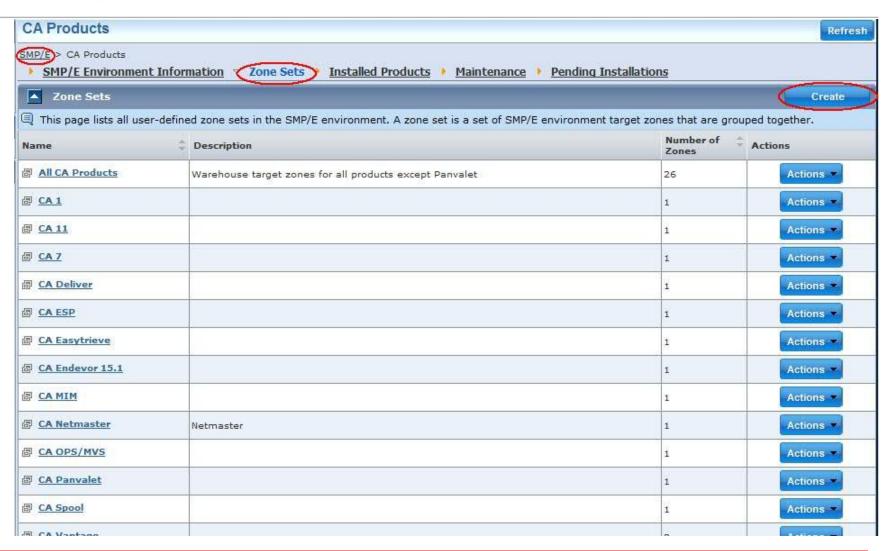


Use ZONE SETS For Large CSIs



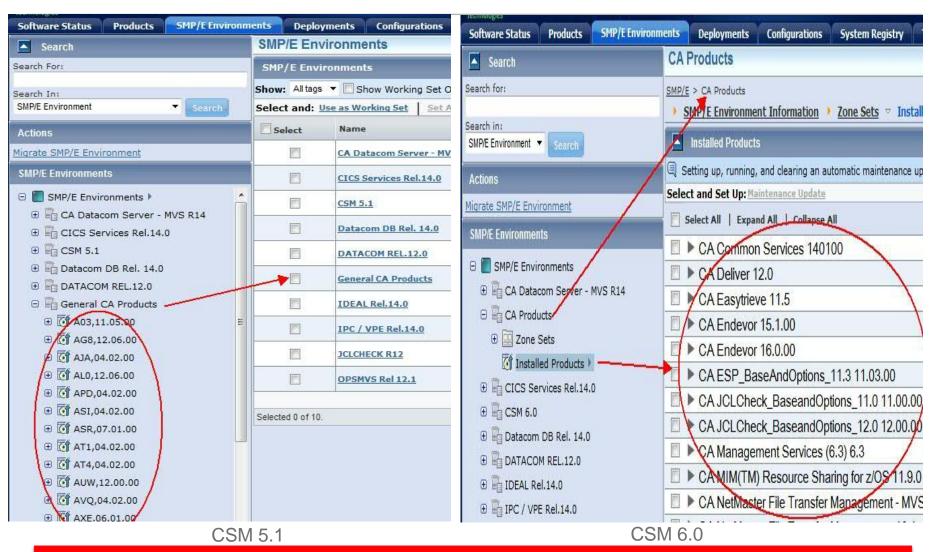


Creating ZONE SETs



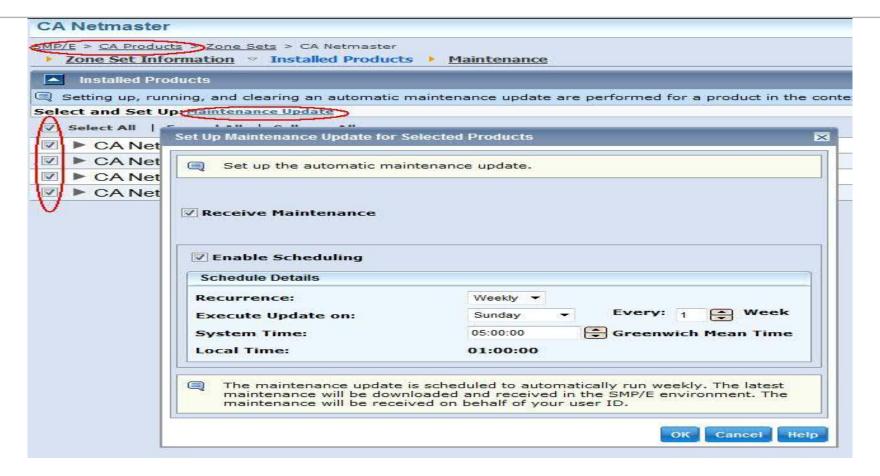


Improved Product Identification





Automatic Update Weekly



Automatically download and receive maintenance on a weekly basis



Additional Maintenance for 6.0

- RO71316 Allows export and save of HOLDDATA to a local file
- RO71047 Corrects sort arrows under IE in the CARS maintenance application summary report
- RO69321 Do not download or receive maintenance when doing an APPLY of maintenance already received



Don't be surprised by....

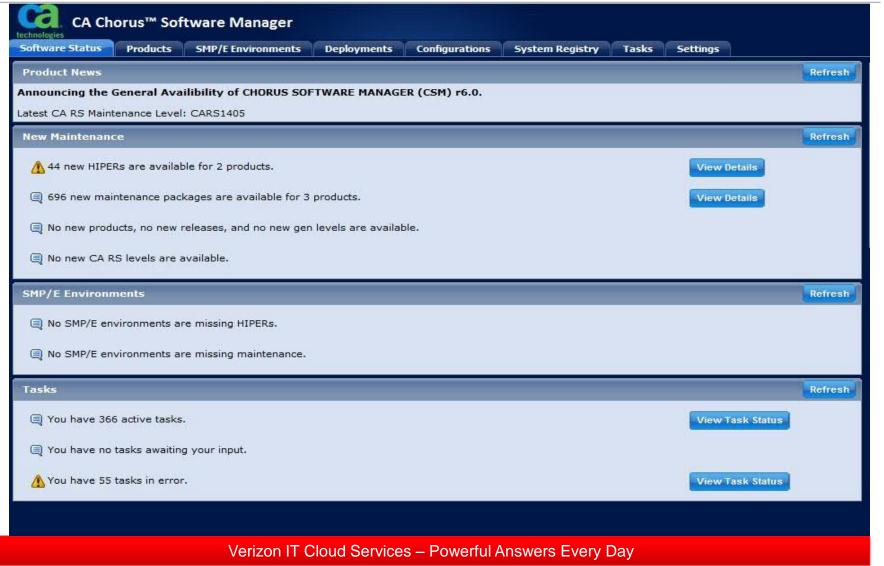


zFS Space Consumption

Menu Options	<u>V</u> iew <u>U</u> tilities	<u>C</u> ompilers <u>H</u> elp				
DSLIST - Data Sets Matching SYSSUP.MSMSERVE.R60.CASC*.DATA Command ===>				Row 1 of 93 Scroll ===> <u>CSR</u>		
Total Tracks: 113055 non-x: 113055 Data Sets:		93 non-	93 non-x:			
Command - Enter "/" to select action			Tracks	%Used	XT	
SYSSUP. SYSSUP. SYSSUP. SYSSUP. SYSSUP. SYSSUP. SYSSUP.	MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS MSMSERVE.R60.CASCS	18.DATA 26.DATA 39.DATA 22.DATA 44.DATA 34.DATA	14280 9270 6855 6690 6375 5295 4830 2940	?????????	2 11 21 3 37 2 38 4	
SYSSUP.	MSMSERVE.R60.CASC	8.DATA	2520	?	18	

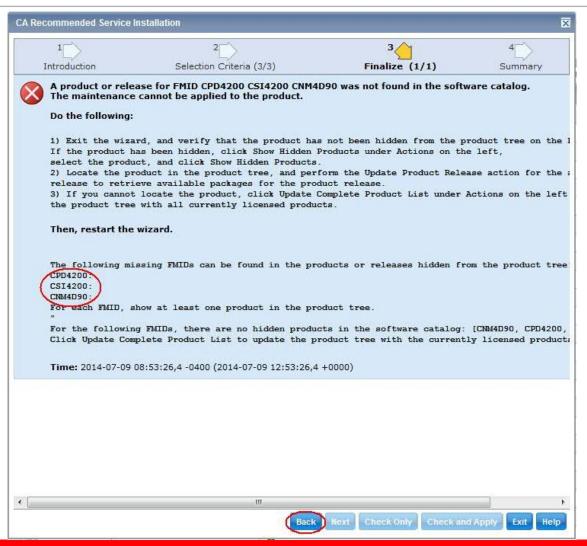


Software Status Page





Unusual Errors





Summary

- CSM takes some of the tedium out of installing and maintaining products
 - You still have to have a good understanding of SMP and shop standards
- Positive improvement over time
 - Early releases had limited functionality and performance issues
 - CA is interested in knowing about issues and resolving them
 - Help is easy to find
- Initially was resisted by our "grey beard" staff
 - Felt it was faster to just run a batch job to do SMP work
 - Challenged by the web interface
 - Multiple ways to accomplish the same task can be confusing
- Still some room for improvement
 - CSM wants a pristine SMP environment which rarely exists
 - Wizards are forgetful
 - Space management
- Positions for the "new wave" of sysprogs



Questions



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