

The Weather Channel Interactive

Andy Drooker

Director of Operations, Infrastructure
and Business Applications



A little about The Weather Channel Interactive

In 2007:

- 14th Most Popular Brand
- weather.com – averaged 36.9m unique visitors per month
- TWC Mobile – Most popular mobile Web content site, 2nd largest overall
- TWC Desktop – Fast growing weather application (just launched v6.0!)
- New Websites – forGetaway, Forecast Earth (Going Green), WeatherBonk.



- Average day traffic:
 - 30m pageviews / day
 - 2.5m pageview / hour
- Consistent, predictable response time is expected across all platforms.

Why did TWCi Virtualize?

- Hardware Savings
 - Instead of purchasing servers for development, QA and/or application deployment, servers can be provisioned on existing VM infrastructure to DRAMATICALLY cut hardware costs.
- Space, Power and Real Estate Savings
 - Better than 10:1 (could be higher) server consolidation ratios will decrease the cost of: rack space, power, cooling, network connectivity, and INCREASE physical real estate in data centers/rooms.
- Improved Maintenance Mechanisms
 - VMs can be moved to other hosts with very little, or no interruption of service. Especially in cases of hardware updates, software patches or various other maintenance procedures which normally would require outages; which normally would encompass multiple applications/services.
- Increased Utilization of Existing Hardware thru Server Consolidation
 - We have found that the average CPU workload is below 15%. This leaves much of the physical server's power unused. Virtualization of multiple physical machines into ONE would allow many machines to utilize the physical hardware more efficiently; while continuing to provide a level of service that the applications/services needs.
- Development and Testing Optimization
 - Using features available, we can take 'snapshots' of machines. This allows us to 'undo' any changes or rebuild very quickly. Hours instead of days. Minutes instead of hours. (You get the point!)
 - Multiple desktop platforms on a single server for QA client testing. (More later)

Currently have two (2) Virtualization initiatives underway

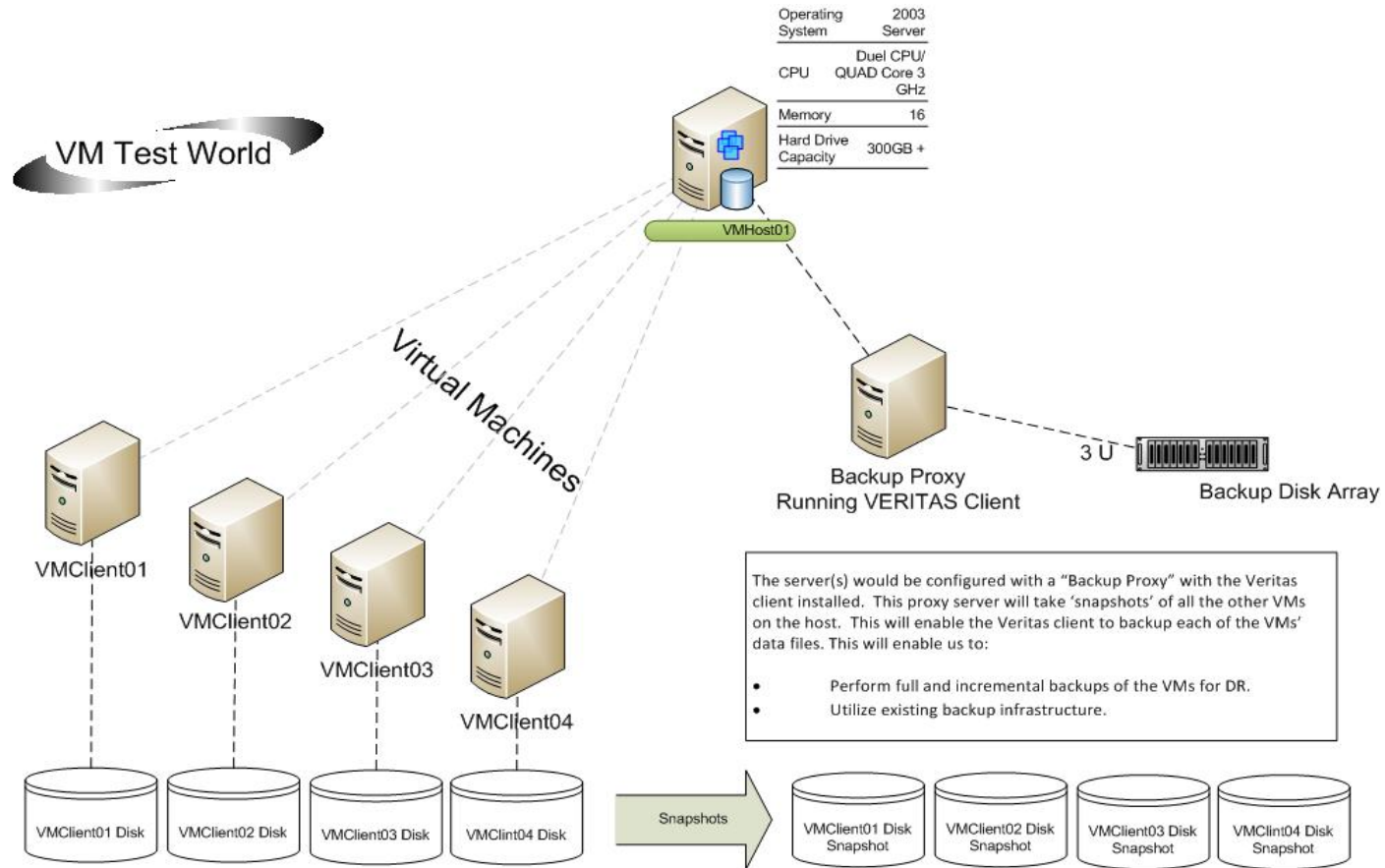
- VSI – Virtual Server Initiative
- VDI – Virtual Desktop Initiative

Two initiatives for two different
quandaries.

QA Predicament (VDI)

- All weather consumer applications need to be supported on multiple OS platforms during a product's lifecycle.
- QA: All QA team members *must* have the ability to access ALL the supported OS configurations to property regression test.
 - Solution must be able to decrease TCO.
 - Empower QA team members.
 - Enables access to ALL platforms to ALL QA team members.

Blueprint of QA VDI



Developers Predicament (VSI)

- How many times have you heard, “The code works on my machine, there must be something wrong with the build on the server!”
- Or, “I was working on my laptop (which is company owned) and it died. Oh, I did not get a chance to upload/check-in the new code to the code repository before it died. I need another week to finish, once I get a new laptop.”

VSI Solution

- **Phase I:** Build a VM environment for ALL developers to use. The VM environment would enable each developer to have an environment mimicking the environment they are developing for.
- **Phase II:** Each developer would have their OWN VM. This VM would be their Virtual Desktop. All development and business related tools would be in the image. All development would, therefore, be local to the enterprise. If the developer ‘accidentally’ corrupts their Virtual Desktop, a backup can be restored within 5 minutes. All processing would be on the ‘server’ and not be dependent on the client. All developers would be working on the SAME base. A homogenous development environment.

Q & A

Thank you!