Visible Ops™ Private Cloud: From virtualization to private cloud in 4 practical steps
• What is Visible Ops™?
• What is Visible Ops Private Cloud?
• Private Cloud defined – agility driving interest
• Studying what works at other organizations
• Visible Ops Private Cloud - four phase approach
  – Phase 1 – Cut through the cloud clutter
  – Phase 2 – Design services, not systems
  – Phase 3 – Orchestrate and optimize resources
  – Phase 4 – Align and accelerate business results
• Ordering your copy
• Engaging the authors
Private Cloud...
What is Visible Ops™?

- Simple, practical, step-by-step advice on how to quickly gain the biggest benefit from proven practices.
- Over 200,000 copies sold – so far!
What is Visible Ops Private Cloud?

- Four-phased approach for managing the development and rollout of a private cloud
- Written with and for enterprise IT execs, data center managers, and enterprise architects responsible for success of private cloud.
- Based on the study of organizations that have implemented successful private cloud solutions
- Grounded by more than 60 years of combined experience in systems management, virtualization, and IT process management.
Private cloud defined

- **Shared**
  - Resource pools (server, network, storage) owned by IT – not business units

- **Dynamic**
  - Resources are tapped, scaled, and retired in response to specific conditions

- **Self-service**
  - One-touch order by user via a service catalog

- **Automated**
  - Low-touch workflow drive provisioning, resource changes, workload moves

- **Policy driven**
  - Pre-determined rules codify what, when and where changes are made

- **Metered**
  - Resource allocation or usage reported to users or funders of IT services

- **Pay-per-use**
  - Costs may be billed based on resource allocation or actual usage
  - Alternatives such as showback and other reporting schemes may be deployed instead of true chargeback
Of all the potential x86 servers in your organization that can be virtualized, approximately what percentage of these systems have actually been virtualized to date? How do you expect this to change over the next 24 months? (Percent of respondents, N=463)

Source: ESG, “The Evolution of Server Virtualization” By Mark Bowker and Jon Oltsik, November 2010
... is turning into adoption of private cloud ...

Gartner Data Center Conference Poll, December 2010:

Will your enterprise be pursuing a private cloud computing strategy by 2014? (n=655)

... due to ‘agility made possible’ ...

Gartner Data Center Conference Poll, December 2010:
What is your main driver in moving to private clouds?
N = 170

Nothing is more important to our business than __________.  
Part of IT’s role is to help optimize time from idea to business results.  
Yet in the past, it could take ___ weeks to get IT services up for ____.
Now it takes ____ minutes.  
It is hard to underestimate the value of letting ________ work  
at their own pace.  

_The clear message is, “Private cloud is not about the computer!”_  
— Steve Darby, Vice President of Engineering, IPServices
Agile private cloud – With caveat

- “If we build it – they will come”

- Only if you =
  - Offer the right services
  - Deliver them as promised
  - And drive value back to the business (lower cost)

- Fail =
  - Wrong thing (service) delivered as a low-cost utility
  - Right thing not delivered quickly or reliably
  - Right thing, delivered quickly, as promised, but at higher cost

- Succeed = “Faster, better, cheaper”
Private cloud is different

• Yes:
  – Built upon heavily virtualized environment
  – Leverage investment in current people, process, tech
  – Use consolidation and HA/DR tools

• But:
  – Private cloud is built differently
  – is run differently
  – is governed differently
  – is sourced differently
  – And most importantly – it is consumed differently

• The success of your private cloud initiative depends on addressing these differences
Visible Ops Private Cloud

- **Goal** – learn from other’s success to streamline your private cloud deployment

- **Offers** – prescriptive guidance and recommendations for planning, implementing, and managing private cloud

- **Collective lessons learned from top performers**
  - “What critical competencies need to be in place to move from initial virtualization deployments to a successful private cloud?”
  - “If you could start over, what mistakes would you avoid?”
  - “What advice would you have liked to have at beginning?”
1. **Adopting service orientation ensures adoption**
   - Users must get comfortable consuming IT as a service
   - IT must get comfortable delivering IT as a service

2. **Dynamic nature of virtualization increases complexity and risk**
   - More (not less) control and operational maturity is required

3. **Managing agility requires change – people, process, technology**
   - Static oriented management processes and functional silos are inadequate.

4. **Cross-functional buy-in**
   - Every functional group in IT is affected
   - Everyone should participate in design and transformation

5. **Focus on the business**
   - This isn’t about the computer
   - **Business-optimized services should give the business a competitive advantage, and elevate internal IT strategic value**
Common characteristics of top-performers

1. Use a service design approach to develop cloud services
   - User -> need -> requirements -> spec -> certify -> deliver -> optimize

2. Simplify and standardize
   - Standardize infrastructure, configurations, and processes (legacy & new)

3. Adopt a plan-build-run organization and process orientation
   - Consensus – can’t deliver with traditional functional silos

4. Focus of highly skilled workers efforts on pre-production planning
   - Time spent specifying, certifying, and documenting reduces build thrash and run thrash

5. Focus on process
   - Define and refine every day work
   - Learn from mistakes and improve efficiencies
   - Foundation for automation
   - Shift work from highly skilled to lower skilled resources

6. Document and share how things get built and how work gets done
Visible Ops Private Cloud – Four phase approach

Also consider:
- Impact on audit and compliance
- Private cloud security risks
<table>
<thead>
<tr>
<th>High value activities</th>
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<tr>
<td><strong>1 - Cut through the cloud clutter</strong></td>
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<tr>
<td>Establish portfolio view of infrastructure</td>
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<tr>
<td>Establish metrics</td>
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<tr>
<td>Start POC</td>
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<tr>
<td>Target workloads</td>
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<tr>
<td>Clean house</td>
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<tr>
<td>Create competency checklists</td>
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| **2 - Design services, not systems** |
| Design Services |
| Standardize configurations |
| Spec and certify templates |
| Clarify targeting policies |
| One-touch order |
| Repeatable deploy |
| Explicit build IQ |

| **3 - Orchestrate and optimize resources** |
| Expand Automation |
| Re-architect infrastructure |
| Improve monitoring and tooling |
| Re-optimize processes |
| Explicit run book IQ |

| **4 - Align and accelerate business results** |
| Set usage targets |
| Re-shape consumption |
| Service costing model |
| Showback or chargeback |
| Resource management policies |
| Triggers and tracking |
Phase 1 – Cut through the cloud clutter

• Goal
  – Reorient existing virtualization efforts

• Focus
  – Identify and prepare for things that will likely change with higher levels of automation

• Mantra
  – “Get ready for shared resources and dynamic workloads”

“Without the right set of processes, procedures, and planning, technology can open the business up to new risks. By creating a project team to discover, design, operationalize, and manage our strategic initiatives in this area, we ensure that we protect our company while enhancing overall competitive agility.”

—Jeffrey D. Tibbitts, CIO Windsor Marketing Group
Phase 2 – Design services not systems

• Goal
  – Use IT as a competitive advantage by designing business-optimized cloud services

• Focus
  – Enable one-touch ordering of these services

• Mantra
  – “Simplify the service offering to make sure the right things are built the right way”

“The ideal design will incorporate not just technology but the blueprint for building new skills, processes, and technology required to deliver business-optimized services. Virtualization discussions need to be more than just a server consolidation discussion.”

—Dmitry Shkliarevsky, Vice President, Professional Services, App Sense
Phase 3 – Orchestrate and optimize resources

- **Goal**
  - Scale to optimize service delivery

- **Focus**
  - Update infrastructure and tooling to enable low-touch management of dynamic workloads

- **Mantra**
  - “Automate response to optimize service levels”

“Private cloud computing is a paradigm shift that requires not only understanding new technologies but also how they impact current systems and processes around your overall service delivery and design. Having a very clearly defined workflow that points back to measurable impact on overall return on equity for the business is imperative to determining if the new architecture is working.”

—Rich McGinty, Director of IT, Metlife
Phase 4 – Align and accelerate business results

• Goal
  – Complete transition to IT as preferred provider of business-optimized services

• Focus
  – Move all targeted workload to private cloud
  – Reshape demand for IT resources using rental model

• Mantra
  – “Respond to drive business results”

“Consolidation, virtualization, automation, utility, and market model are essential ingredients of achieving success in the cloud. Successful IT shops architect for change realizing that the underlying technology is still evolving. They develop succinct processes with IT as the service broker that mediates across the various technology paradigms.”

—Bryan Cinque, IT Architect, Cisco IT
Endorsements

• “It’s not just another picture of architecture or analysis of best practices versus potential pitfalls. It is a tour de force description on how to get there.” Charles Babcock, Editor-at-large, Information Week

• “The Visible Ops approach captures many of the lessons we think are key for project success. This handbook offers a solid four-phased approach to implementing a private cloud program.” Kalyan Kumar, Worldwide Head of Cross Functional Services, HCL Technologies Ltd – ISD

• “The Visible Ops Private Cloud handbook both identifies and navigates through the obstacles to implementing a private cloud within the enterprise. It contains a compilation of best practices from top-performing IT organizations that will benefit anyone on their journey to the private cloud.” Joel Kehle, Cloud Architect, Qualcomm

• “This comprehensive work makes the high-risk undertaking of a private cloud initiative accessible to all by providing clear guidance based on a solid methodology. A must-read if your organization is considering a private cloud.” Mike Orzen, CMA, CFPIM, PMP, Co-author of the Shingo Prize-winning book, “Lean IT: Enabling and Sustaining Your Lean Transformation”

• “Without a plan, plan to fail. By referencing Visible Ops Private Cloud, highly success companies can strengthen their business planning and execution through a methodology with proven core business and IT process.” Mark Bowker, Senior Analyst, Enterprise Strategy Group, Inc.
Summary

• Agility is primary Private Cloud benefit
  – But business-optimized services give IT strategic value

• Technology is not the biggest challenge
  – But architecting a solution that “delivers services as promised” is critical for changing demand

• Creates both threat and opportunity
  – If not get it right – some or all users going to find alternative providers
  – If get right – IT can deliver strategic value and give the business competitive advantage
Meet the authors

Andi Mann
CA Technologies
Andi.mann@ca.com
Twitter @AndiMann

Kurt Milne
IT Process Institute
Kurt.milne@itpi.org
Twitter @KurtMilne

Jeanne Morain
Flexera Software
jmorain@flexerasoftware.com
Twitter @JeanneMorain
Private cloud requires a team effort:
- Buy one for yourself
- Buy one for your boss
- Buy one for everyone on your team

Available now:
www.itpi.org
www.amazon.com

More resources:
CA.com/VisibleOpsPrivateCloud
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