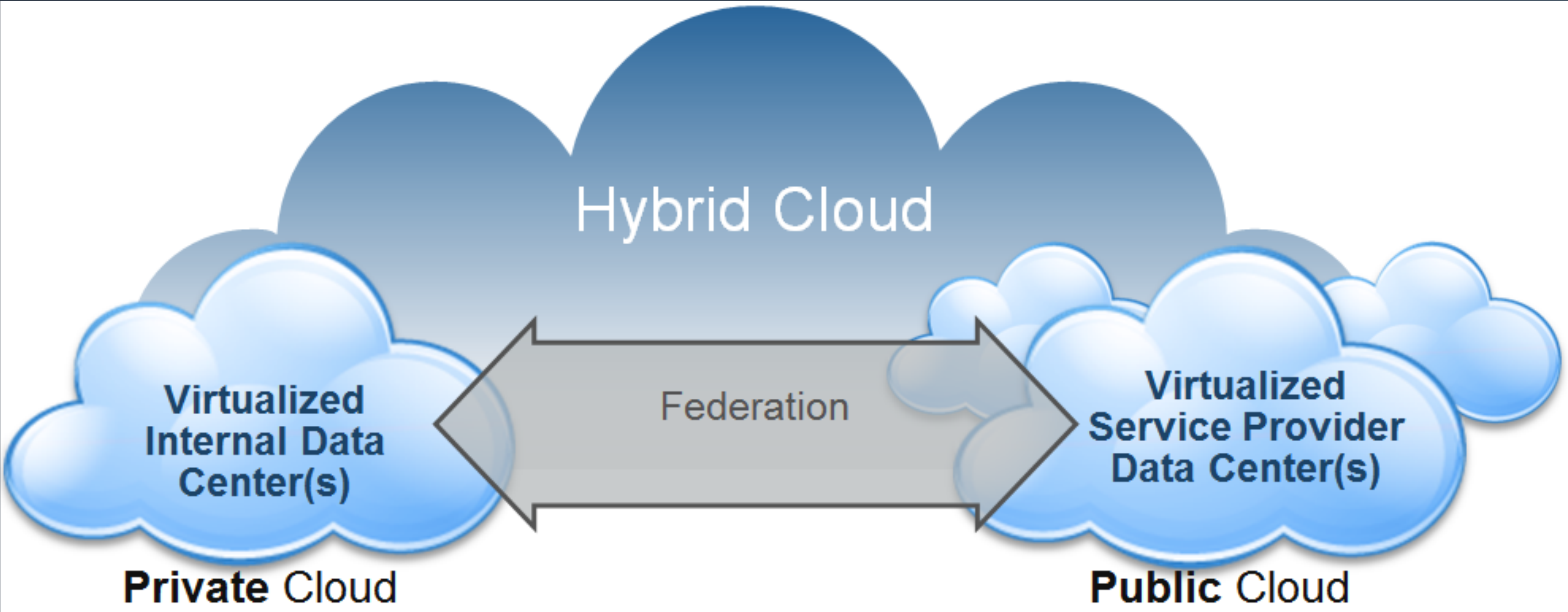


Automation: The Key To Hybrid Cloud

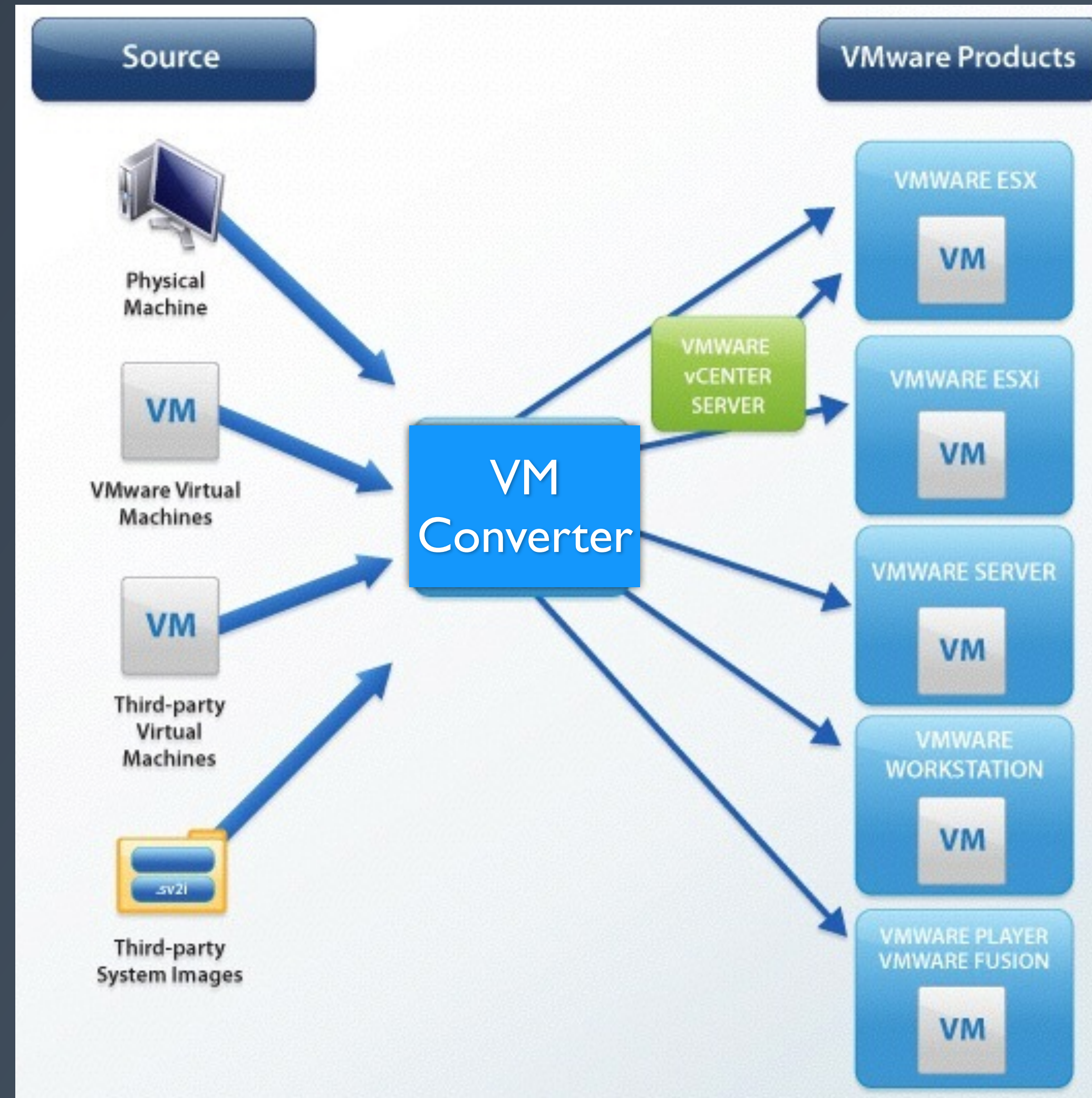
Michael Ducey — Enterprise Architect — Chef
@mfdii



- Linux Engineer
- Operations
- Performance Engineer
- Capacity Planning
- Cloud Architect
- Automation
- Chef
- MBA, MS



P2V Your Technical Debt



Why the technical debt?

Failure to capture configurations

- Manual Changes
- Not Captured in a repeatable format
- Changes poorly documented

Large cumbersome automation

- Hard to use
- Not Repeatable
- Not Idempotent
- Not Convergent

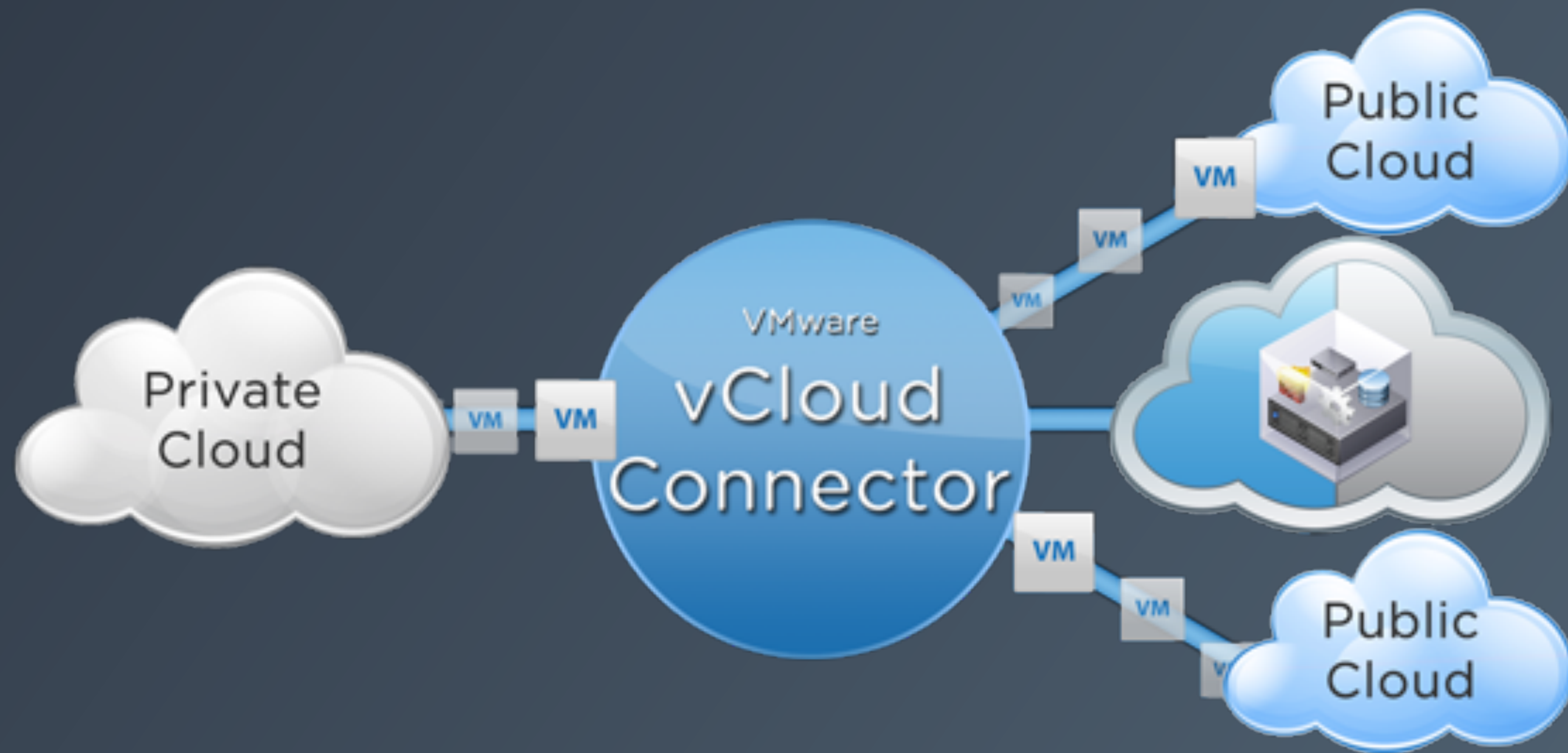
Low perceived value of automation

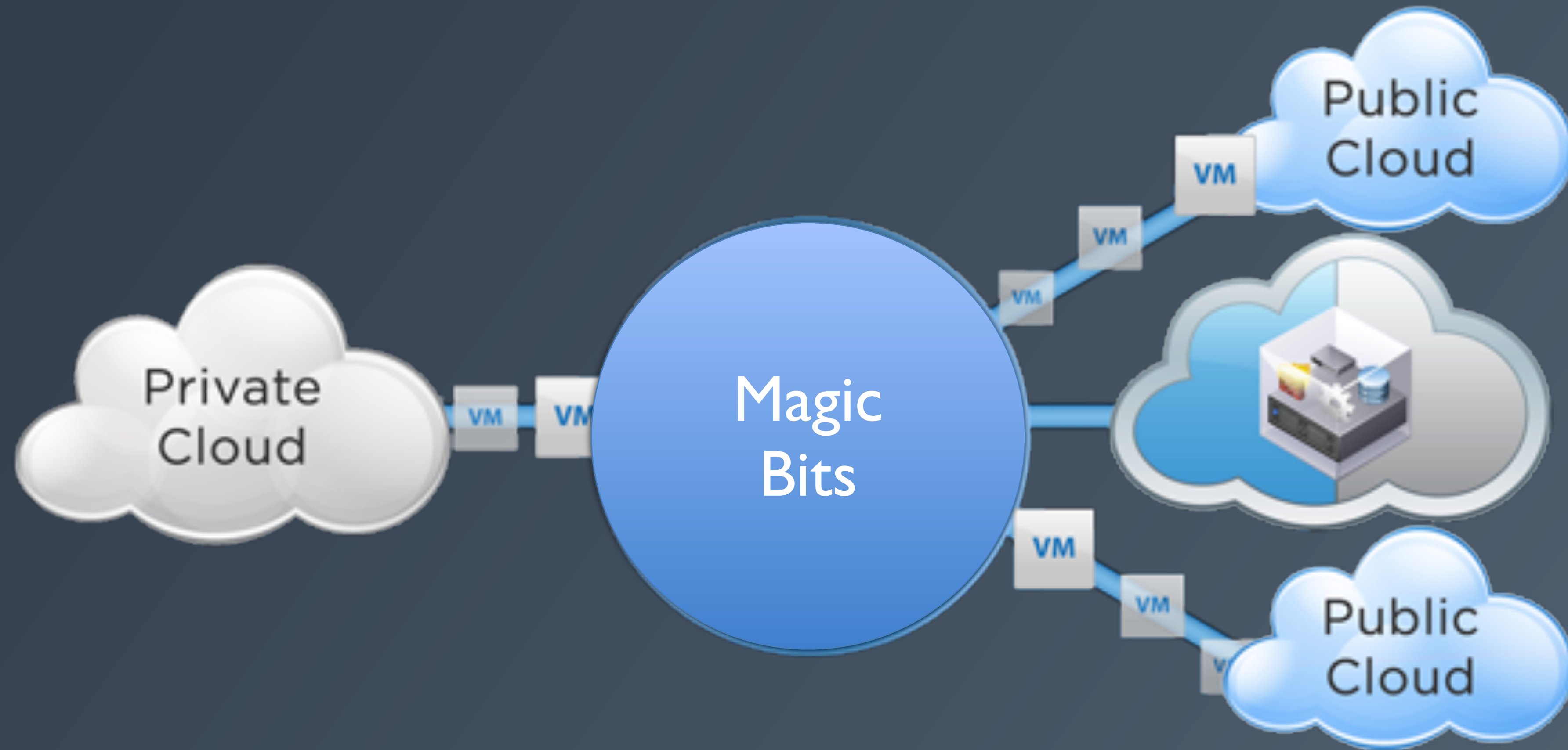
- Quicker to do it manually
- Focuses on longer term results
- Payback period for automation

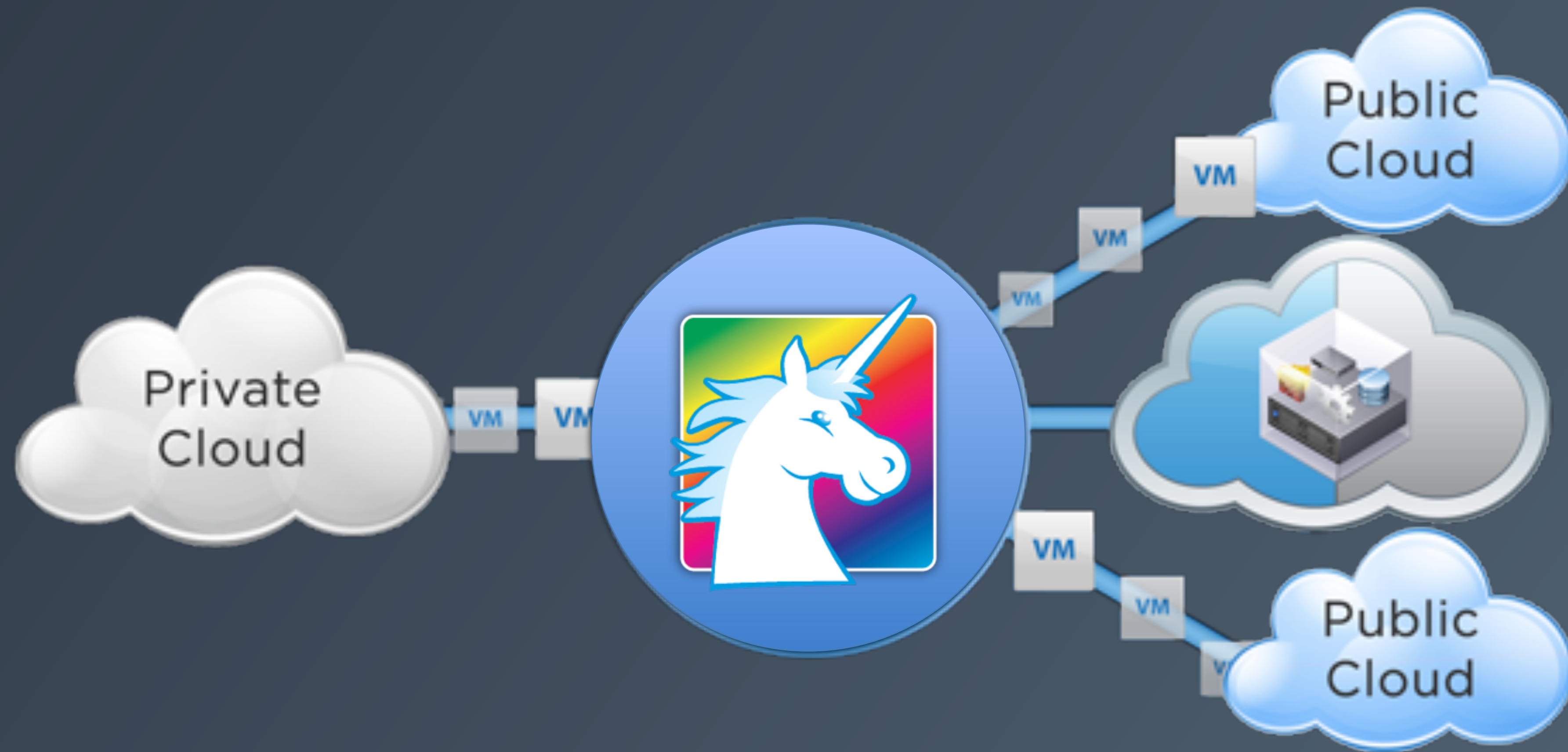
Images are all I need

- Golden Images
- Build images to repeat configurations

Enter Hybrid Cloud

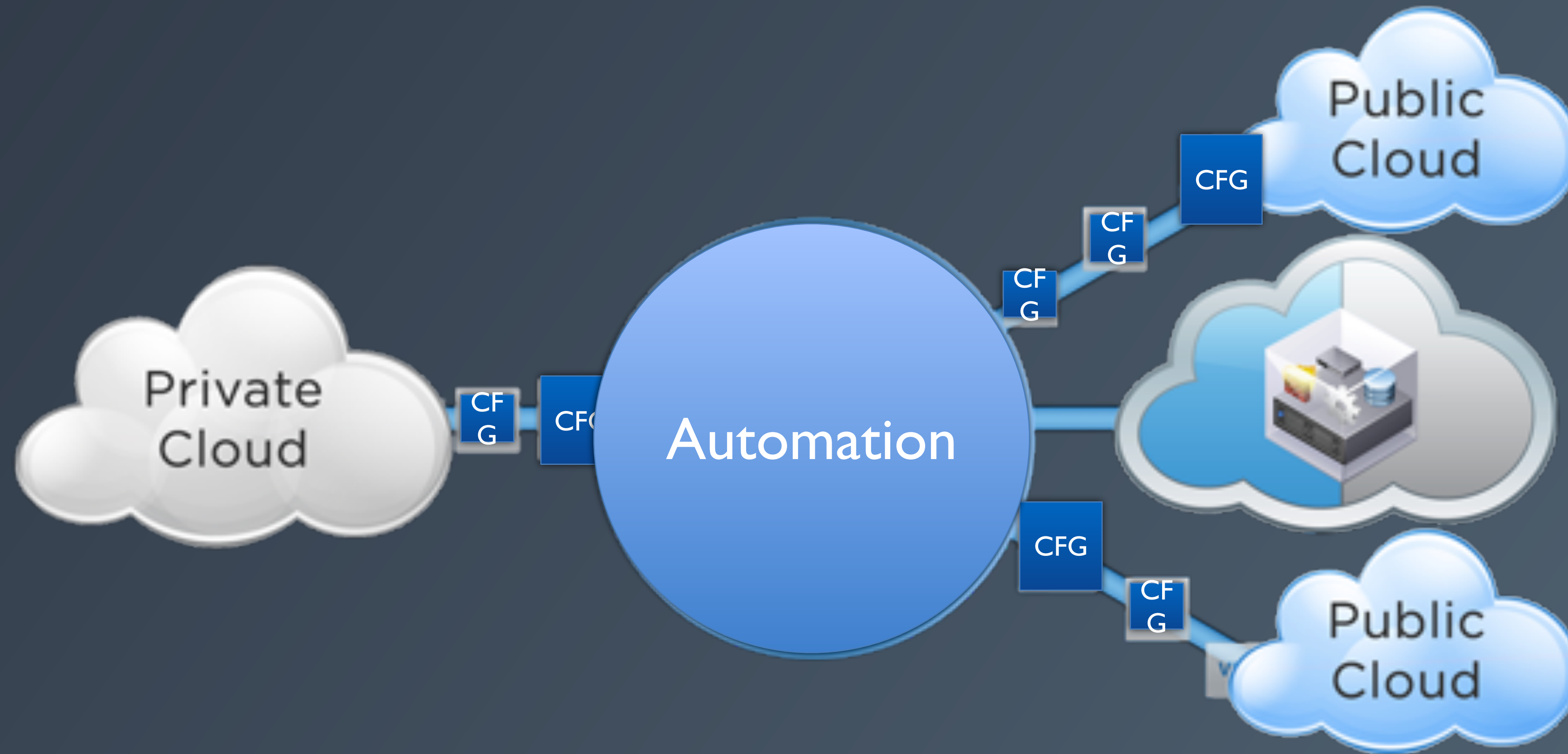






Problems

- VMs are heavy
- C2Cing your technical debt
- Large management overhead
- Doesn't really realize the benefits of Cloud



Solutions

- Configs lighter than VMs
- Reduces moving data already in your Clouds
- Can leverage things like SCM
- Define once, run anywhere

Problems

- Requires discipline
- Doesn't solve data issues
- Requires upfront investment of time

The question isn't: how do I get a server,
defined by VM (or instance) into another
Cloud to serve my application

The question is: how do I get a server,
defined by a set of finite configurations,
into another Cloud to serve my application

Some things I've seen work

- Ignore legacy
- Focus on Cloud first
- Get development buy-in to change app stack
- Build Composable, Data Driven Automation

Infrastructure as Code

TDD of Infrastructure Code

- Test Driven Development
- Verify before deployment
- Reduce development time

Leverages Software Development Lifecycle

- Infrastructure Code stored in Source Control
- Who, What, When, Why, How

Repeatable and Reusable

- Write once, Run anywhere
- Cross Cloud, Cross Platform

Additional Requirements

- API Based automation
- Node based evaluation and execution
- Declaritive DSL
- Flexibility of real language

Questions?

Automation: The Key To Hybrid Cloud

Michael Ducey

