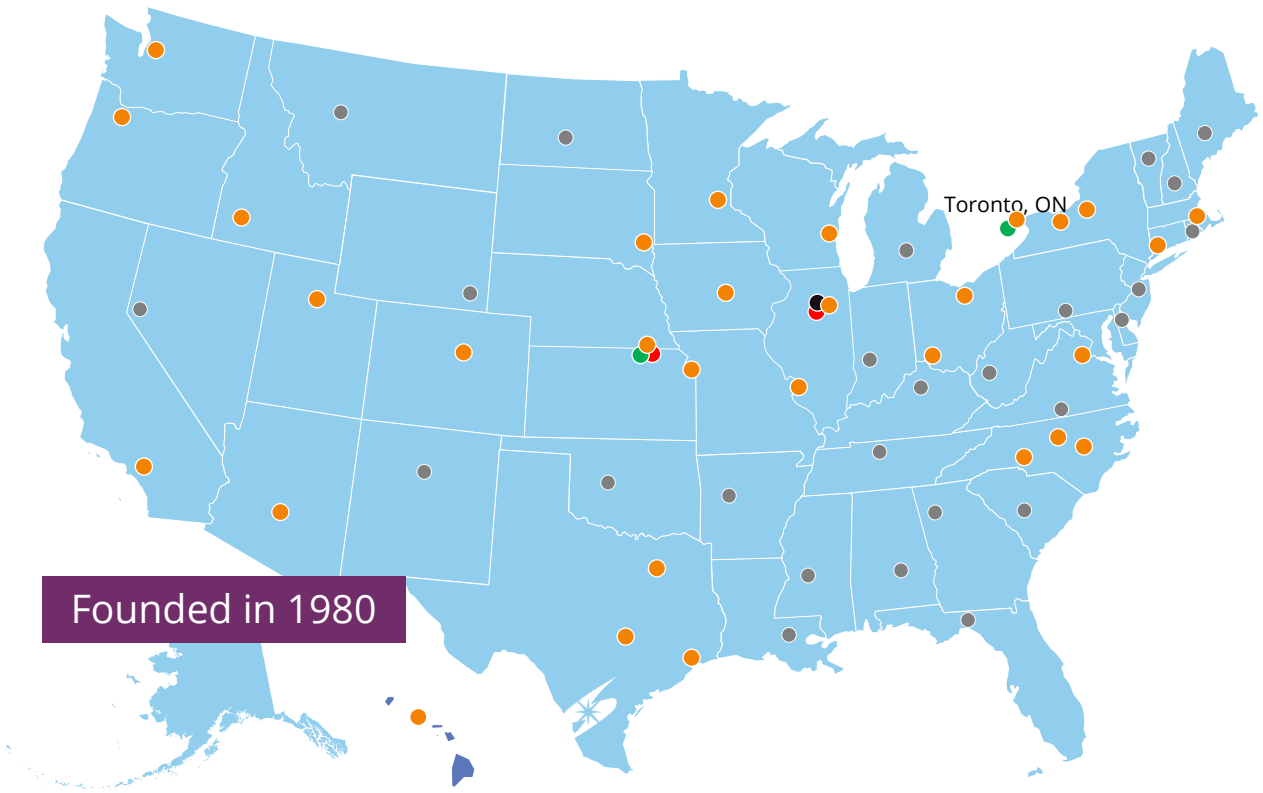
SIRIUS HEALTHCARE

Hybrid Cloud DR for Healthcare

- Challenges around Disaster Recover (DR) for Healthcare
- Sirius Expertise and Solution Architecture
- Benefits and Considerations around Hybrid DR
- Next Steps

Agenda

National coverage



32 offices across the US

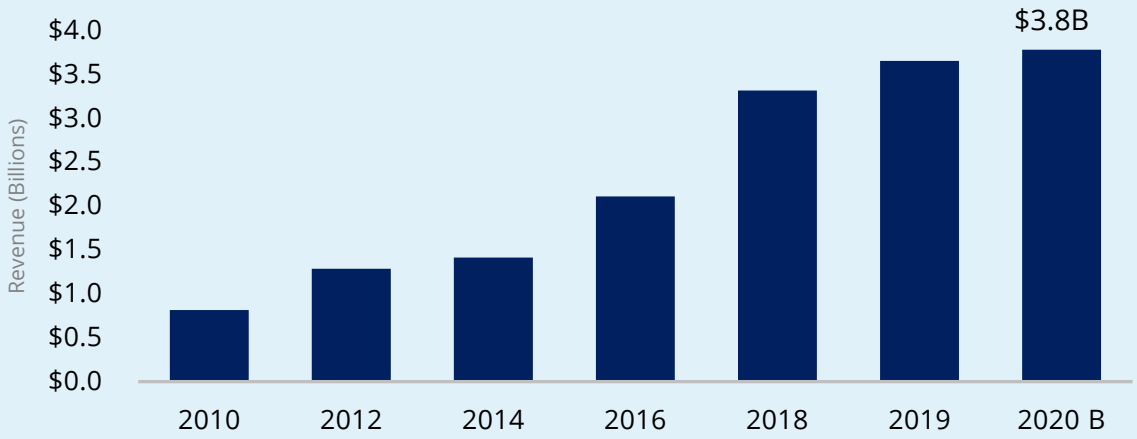
Sirius Corporate Headquarters

- Regional Offices
- Regional Coverage
- Data Center
- NOC
- SOC

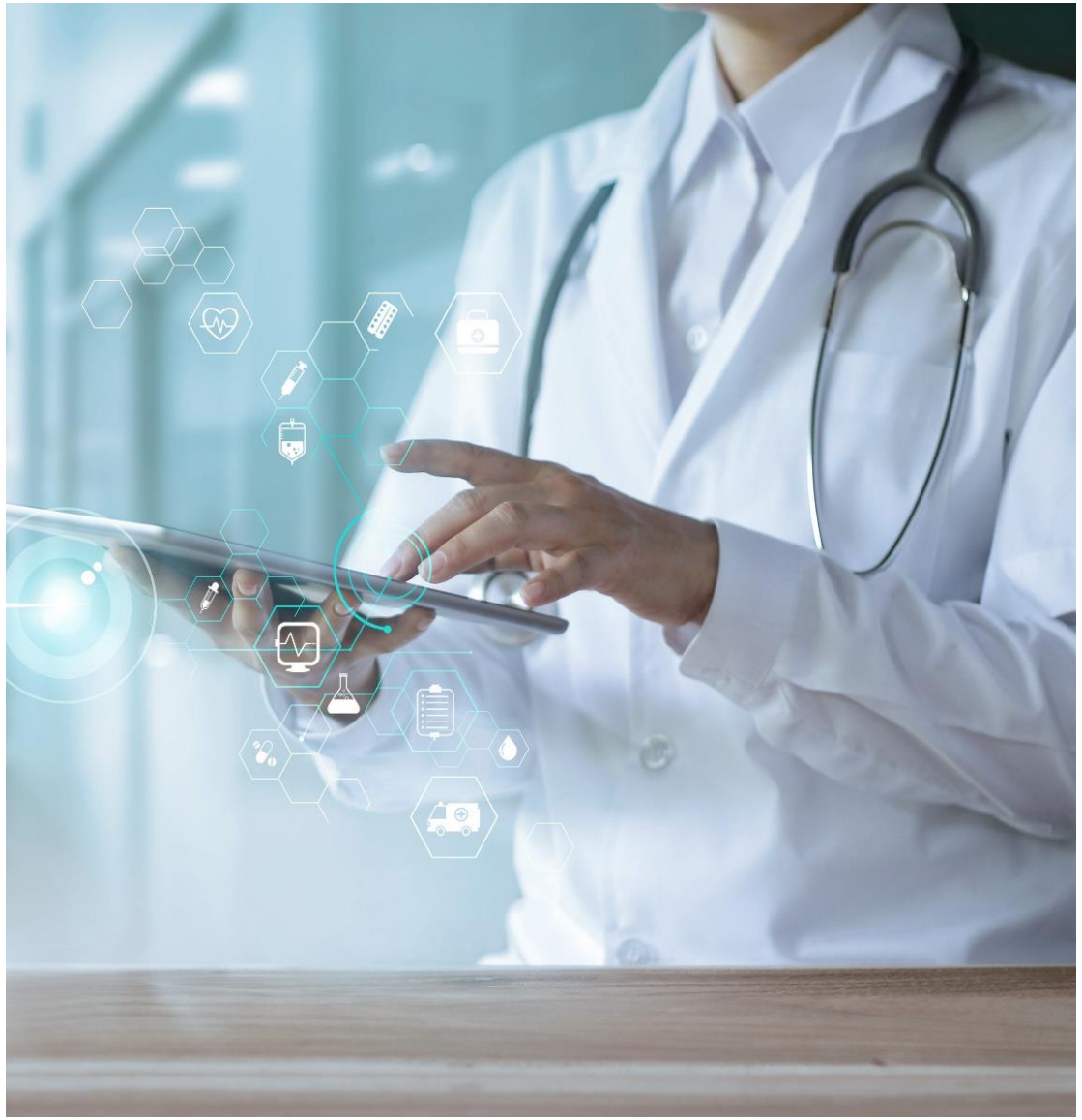
Company overview

- Solutions spanning lines of business and the data center
- Recognized industry leadership
- 450 Healthcare clients | 189 Epic
- Deep experience and skills
  5,500+ sales & technical certifications
  2,600+ highly skilled employees
  1,500+ technical resources

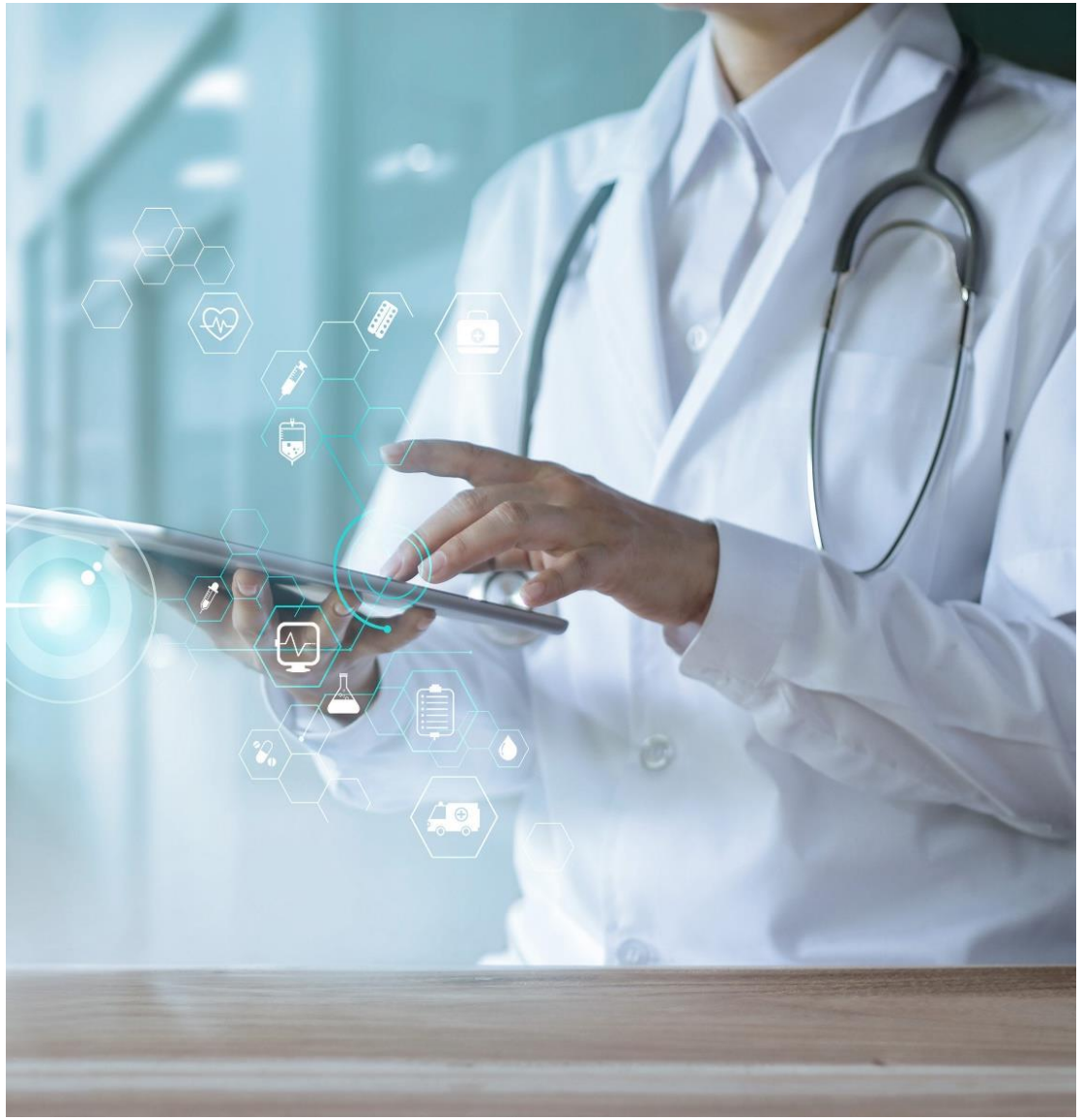
Sustained financial strength



Based on Sirius financials Gross Revenue. 2019 pre-audited results.



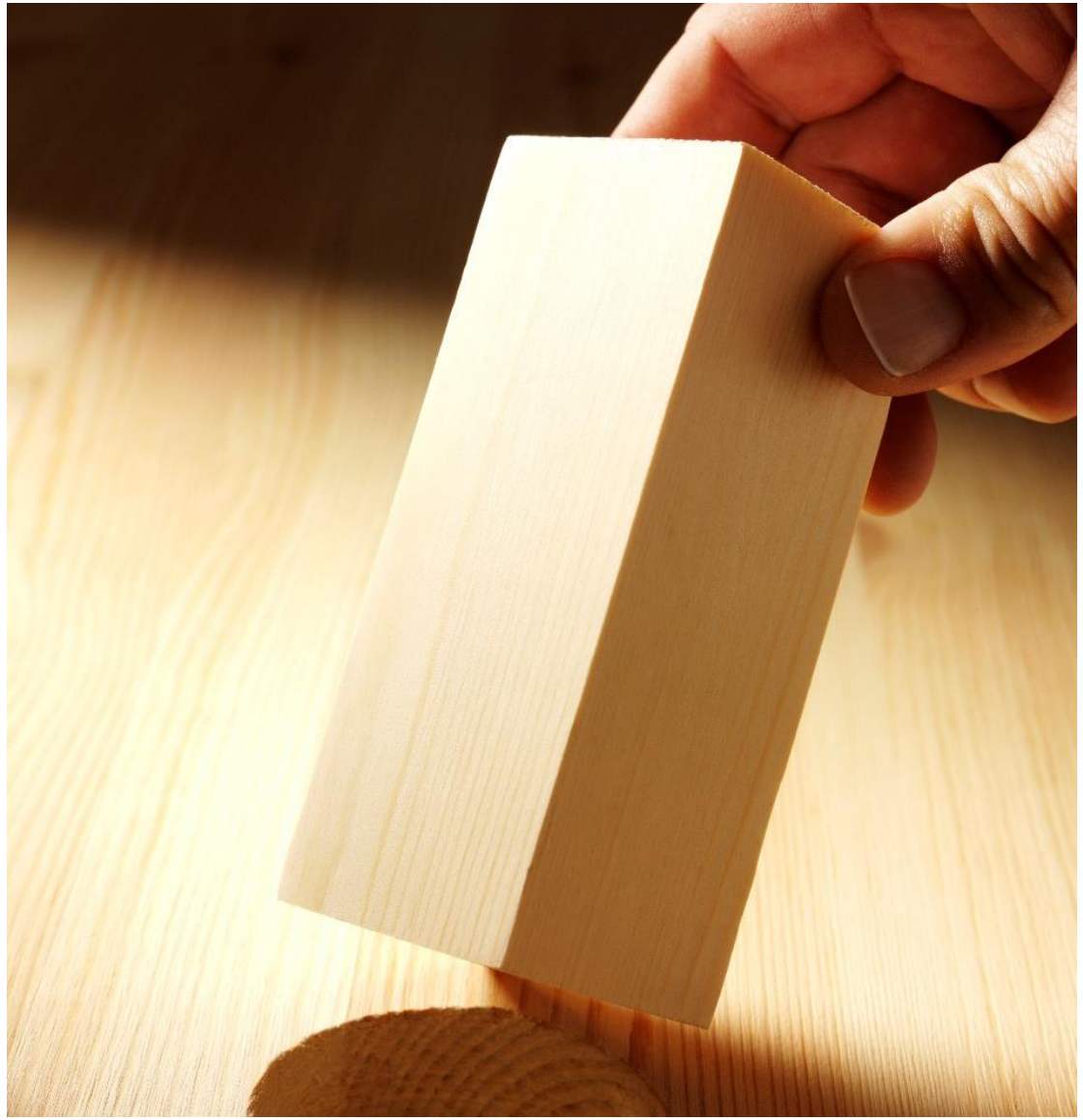
- Patient care depends on response readiness and preparedness
- Disaster Recovery (DR) is paramount to prevent serious harm caused by outages and lost data
- 70% of healthcare organizations say IT industry is destined for the cloud - Reaction Data, May 2019
- Hybrid DR – enabling management of disaster risks/compliance/reduced costs



- Data Back Up is NOT OPTIONAL
- DATA must be RECOVERABLE
- STORE BACKUP COPIES OF ePHI OFF SITE
- BACK UP FREQUENTLY
- Security requirements applied during EMERGENCY MODE
- HITECH says to ENCRYPT OR DESTROY DATA AT REST TO SECURE IT
- Must have WRITTEN PROCEDURES
- TEST your Recovery plan
- Non-compliance penalties are severe

The challenge…

- Legacy applications – can’t move fully to the cloud
- Cost pressures and scalability
- Experience and skill set
- EMR platforms and intellectual property



- Cloud scalability while maintaining legacy environment
- Flexible environment allows us to leverage technology refreshes
- Cost savings with pay-as-you-go, on-demand DR spin-up
- Enables out-of-region capabilities

- Cloud, DR and Healthcare expertise
- Trusted partner for enterprise DR/BC
- Dedicated Healthcare practice and Cloud Center for Excellence
- Experienced with the most complex/demanding apps (EHR)
- Collaborative approach:
  CLIENTS + APPLICATION VENDORS + CLOUD PARTNERS = CLIENT SUCCESS

Top Integrator
COMPRISED OF

CDO · CIO · CISO · CTO · COO

450
Healthcare Clients
(Payors and Providers)

189
Provider Clients
using Epic EHR

Frequent Publication in InfoWorld, TechTarget, CRN

Active Contributor to:
Tech Data IoT and AI Advisory Council, CompTIA IoT Advisory Council, CHIME, HIMSS, and Analytics Advisory Council

2 **Dedicated Healthcare** INNOVATION CENTERS

250 **Healthcare-trained** PROFESSIONALS

$650M+
Vertical Inside a
$3.8B IT Integrator

Healthcare by the Numbers

SIRIUS HEALTHCARE

SIRIUS ITC SERVICES

Cloud Readiness Assessment

Hybrid Cloud Transformation

Data Center Transformation

Business Impact Analysis (BIA)

Application Rationalization

SIRIUS CLOUD PRACTICE

Cloud Assessment(s)

Cloud Delivery Services

Cloud Governance and Planning

SIRIUS MANAGED SERVICES

Managed DR

Managed Cloud

Aggregation Services (Circuits/colo)

SIRIUS IT STRATEGY

Colocation Infrastructure Design

Network Assessment(s) & Design

SIRIUS PARTNERS

Cloud: Azure and AWS

Continuous Data Protection:
Veritas VRP and Zerto

File Replication: PEER Software

Colocation Facilities:
Sirius DC and Equinix

App/Desktop Delivery: Citrix

Storage: IBM/NetApp/Pure Storage/Dell

Compute: IBM Power/Cisco UCS

Discovery: Flexential

No DR/BC technology solution

Infrastructure exists but no plan/ability to execute

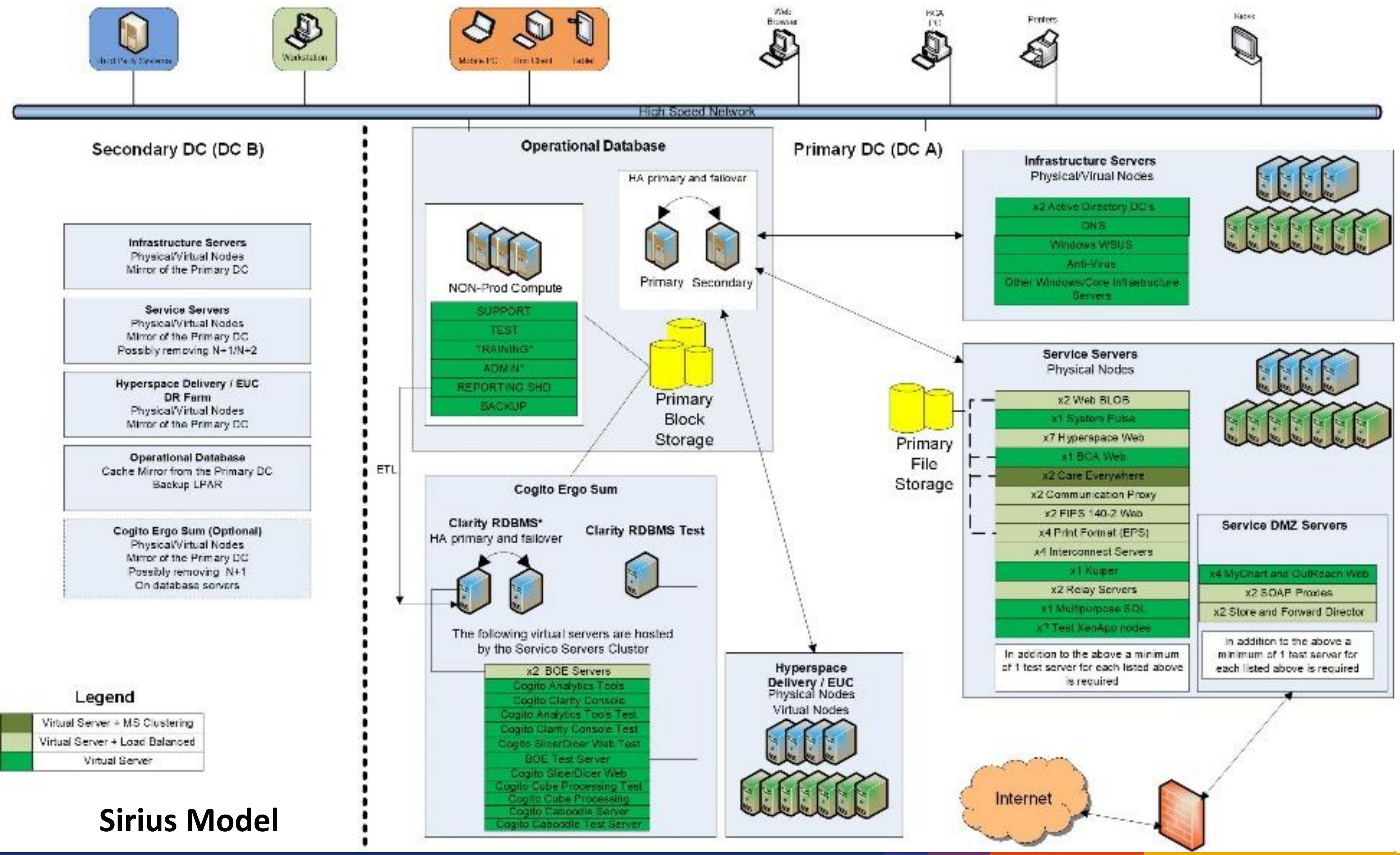
Like-for-Like Active/Passive
(Inclusive/Exclusive of Cogito)

- Switch and stay for ~6 months at a time
- Activate when necessary

Like-for-Like Active/Active (Inclusive/Exclusive of Cogito)

- Components capable provide services from both DCs
- Citrix / Service Servers / SQL Always on ....
- Reduces infrastructure requirement

SIRIUS HEALTHCARE

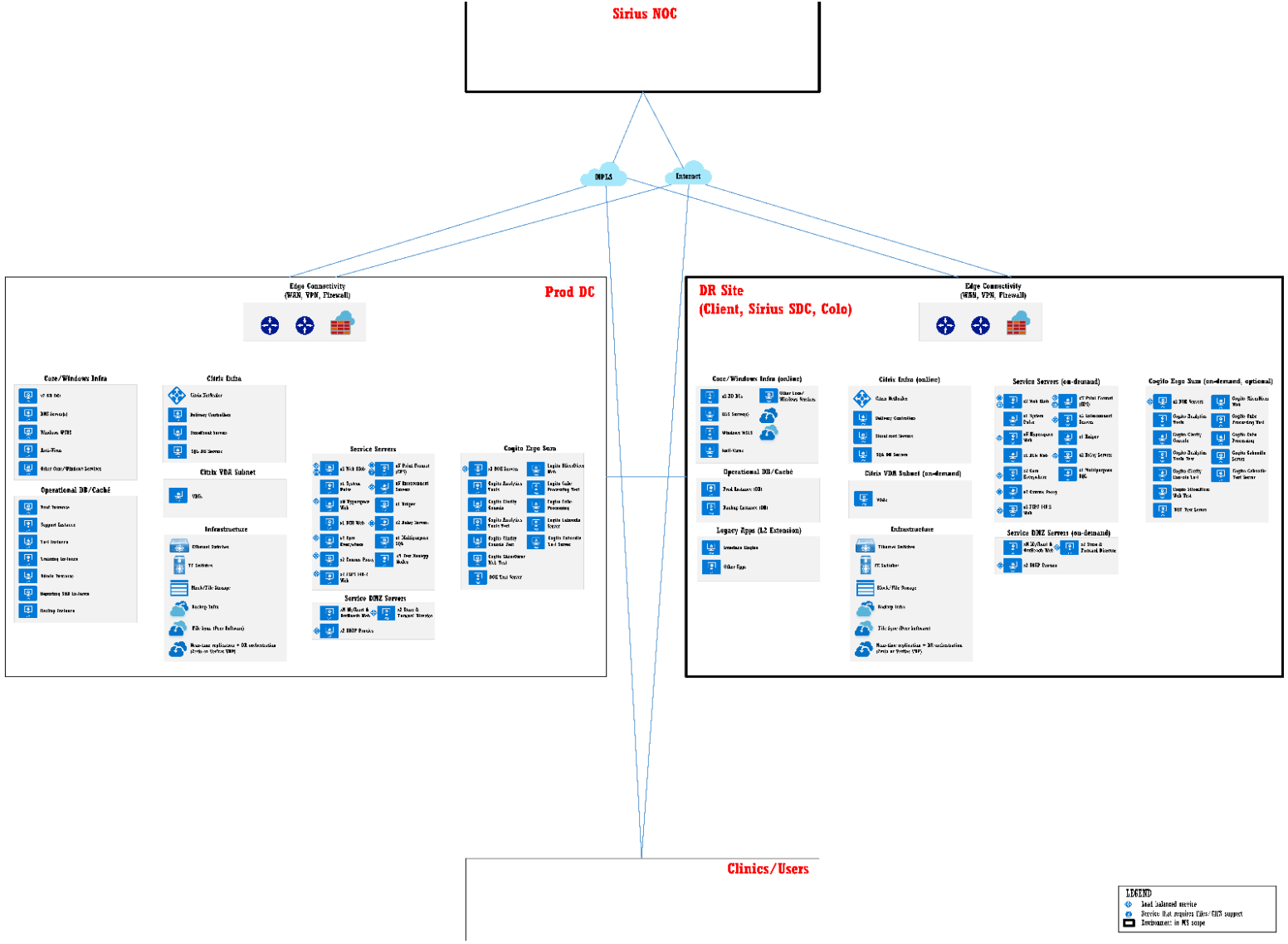


Sirius Model

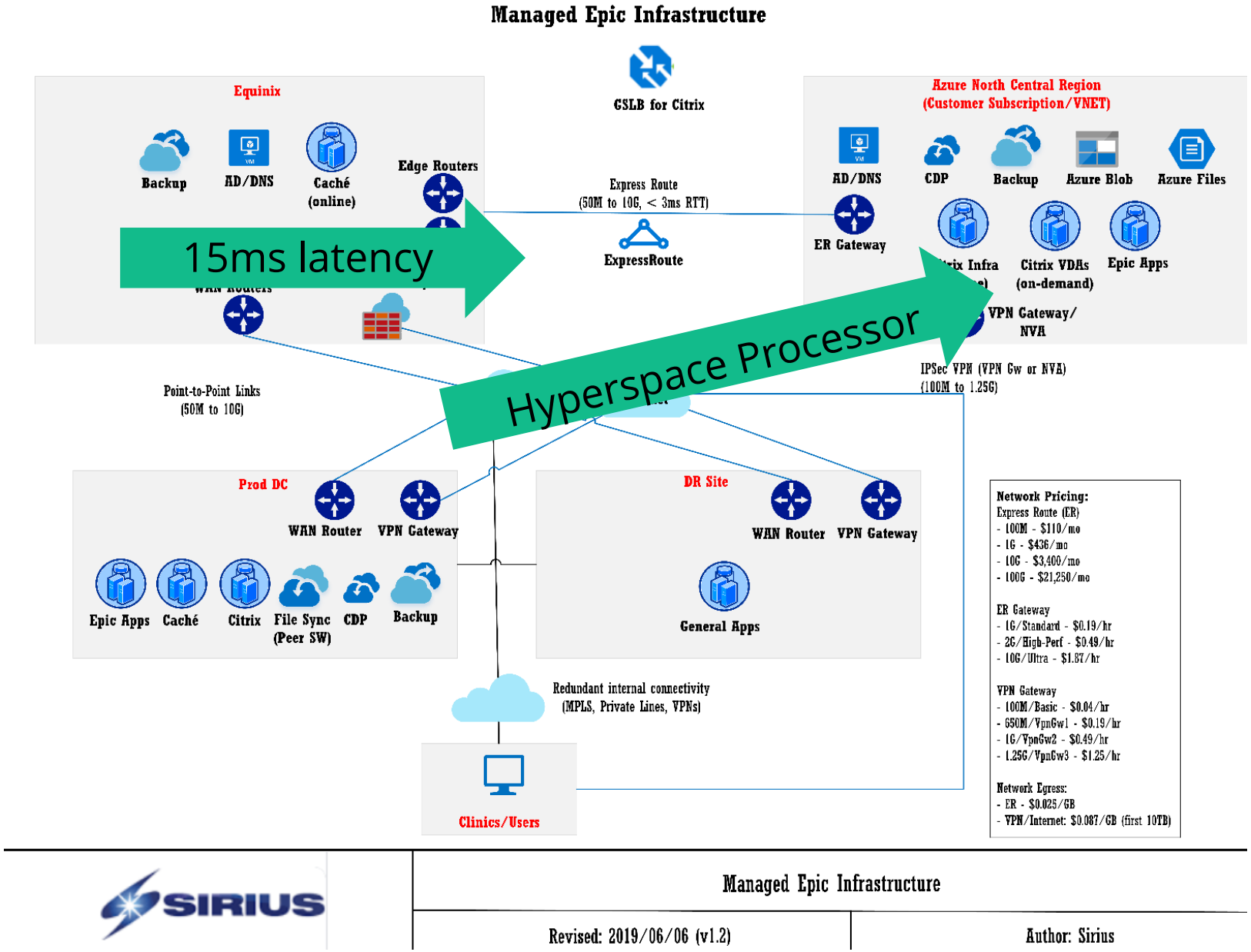
› [illegible]
limitations

Traditional Reference Architecture

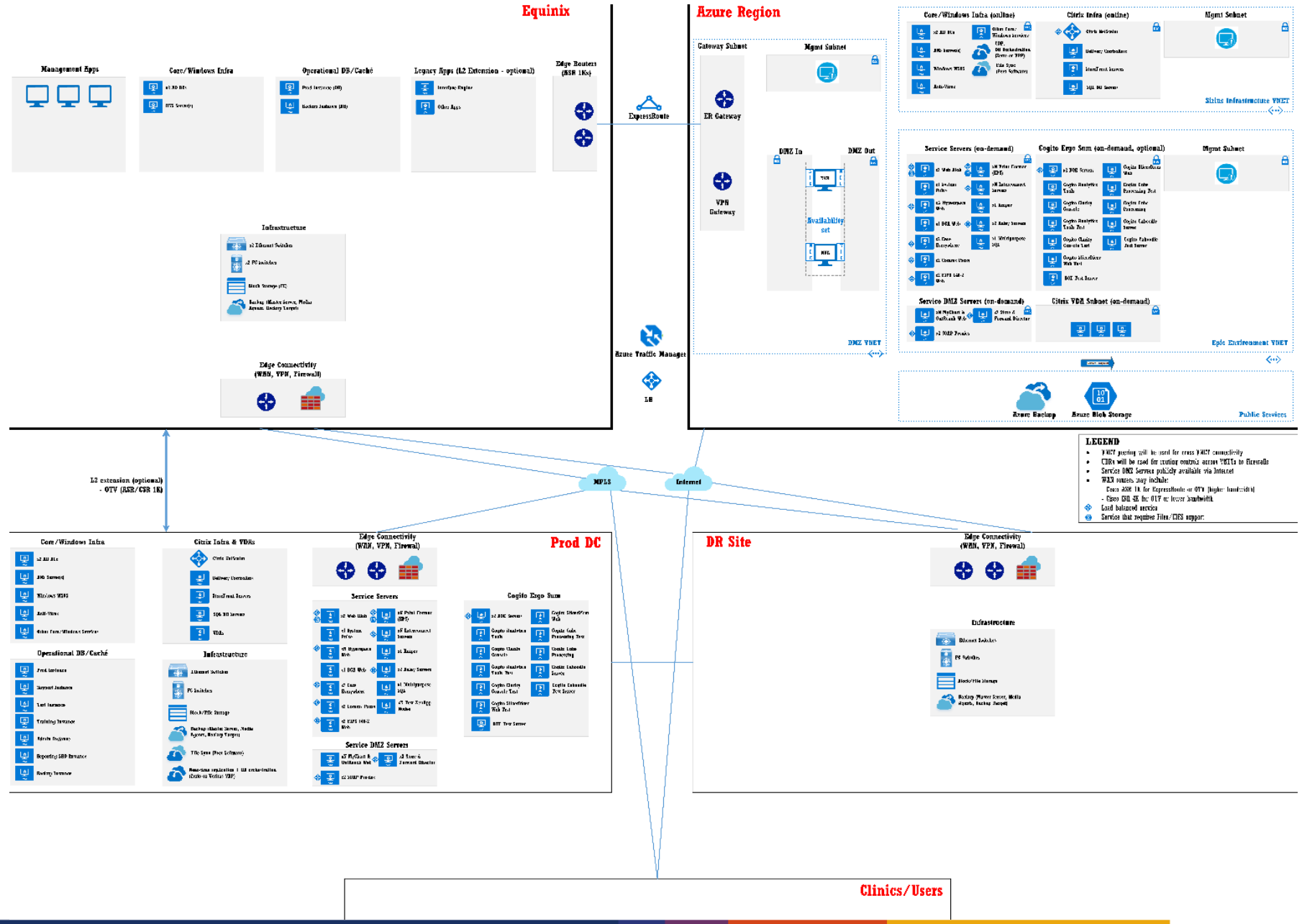
- 100-130% of infrastructure on both sides
- Perpetual software licensing wasted as passive site idles
- Operational overhead with maintaining passive side
- Most predictable /discrete solution
- Traditional financial consumption models



- Significantly less Infrastructure required
- Reduce Operational overhead of maintaining physical hardware in passive site
- Hybrid model allows for addressing organizations with applications, size and platform constraints that limit full cloud transition



SIRIUS HEALTHCARE



Hybrid Cloud Detail

SIRIUS HEALTHCARE

IaaS SLA and Epic Architecture aren't a great mix - 99.9% uptime

Azure SLA for Virtual Machines

Amazon Compute SLA

Epic Architecture and Hyperscaler standards

Latency between regions exceed 15ms

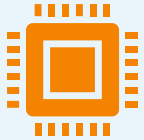
Not all Epic services can take advantage of reginal resiliency

Limits need to be managed

Azure Hybrid Benefit
- Not a 1:1 conversion

It's like solving for pi

Azure Hybrid Benefit



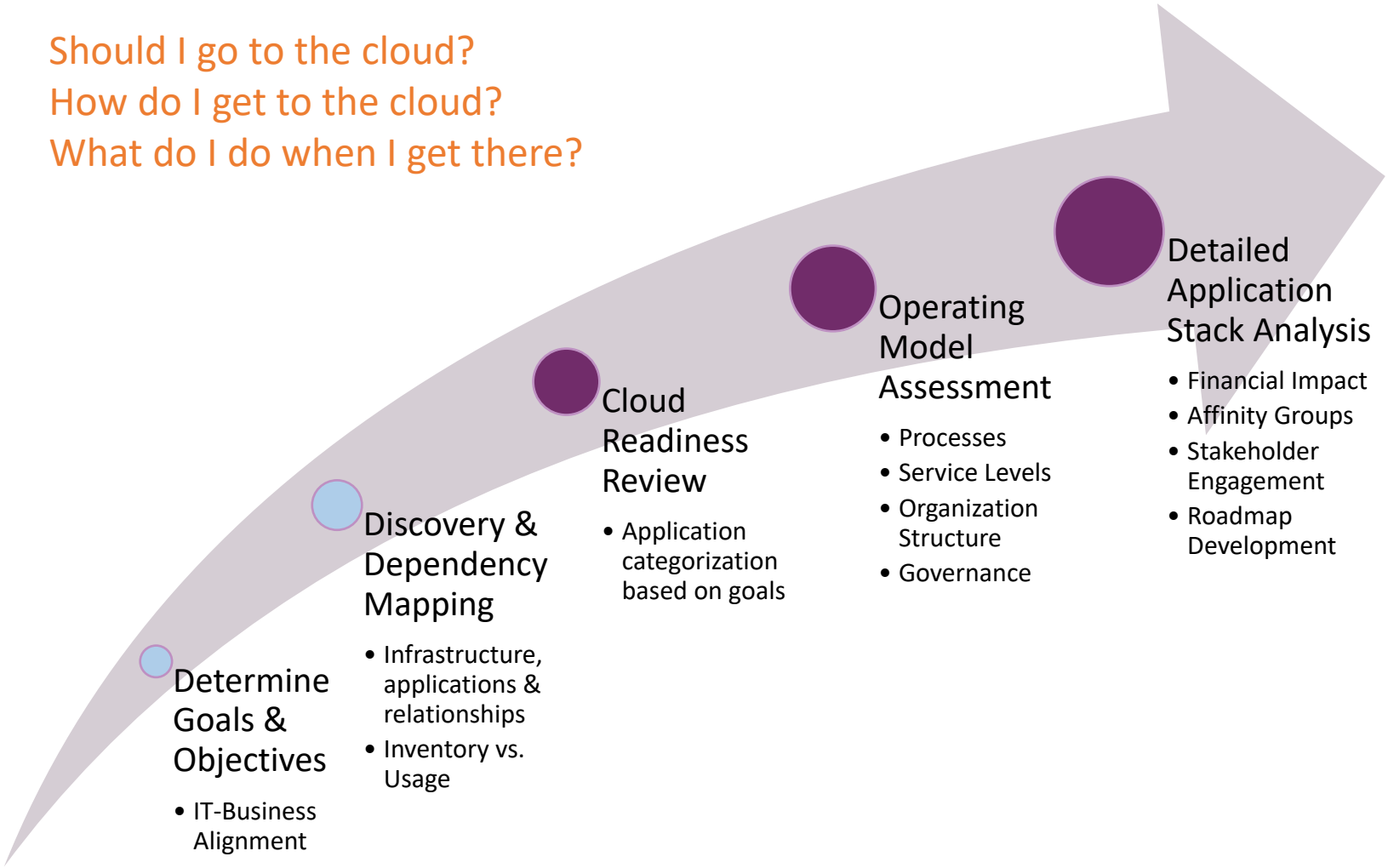
Compute instance choice

ODB memory/core/processor family and storage performance limitations

Hyperspace/Presentation layer processor family limitations

Resource exhaustions in a region

Should I go to the cloud?
How do I get to the cloud?
What do I do when I get there?



Potential Next Steps:

- Cloud and/or CoLo provider selection
- Governance (re)structuring
- DR capability enhancement
- Operating Model changes – ITSM & DevOps/Agile
- Network enhancements
- Landing zone development
- Detailed migration planning and execution
- Application rationalization & modernization
- CMDB population


SIRIUS
HEALTHCARE
SIRIUSCOM.COM