



Cisco Data Center Best Practice – SP:

IDC Stabilization and Optimization



David G Wilson

Beyond Consolidation
Build **Virtualization**
Complete Automation
On the Network Architecture

Cisco Datacenter Day

Customer Challenges

- Customer had three Tier 1 data centers, each with its own network design deployed
- Customer is constantly adding new applications and technologies to stay competitive in SP market
- Most applications are web facing to the internet so its hard to gauge how popular (Busy) the application will be
- Have been “bit” by known bugs in past causing some application outages
- Current planning and network engineers not “up to speed” on all of the DCN technologies
- Network monitoring does not include all of the DCN devices

Customer Business Requirements

- Application and Network High Availability
- Standards in terms of network design and configuration practices
- Scalable Design (5 + Years)
- Secure Environment

DCN Engagement Specifications

- Help customer approve and deploy a standard Data center routing and switching design
- Solution: 6500 3-Tier Infrastructure Design utilizing OSPF routing between the three datacenters
- HW: Layer 2 switches, core/aggregation routers, SLB, SSL accelerators, GSLB, Caches, and Video Streaming devices
- Services: DC Network Migration Planning and Design, Proactive Software Analysis services, proactive bug reviews, DC Network Quarterly Knowledge Transfer
- Time Table: Ongoing Services

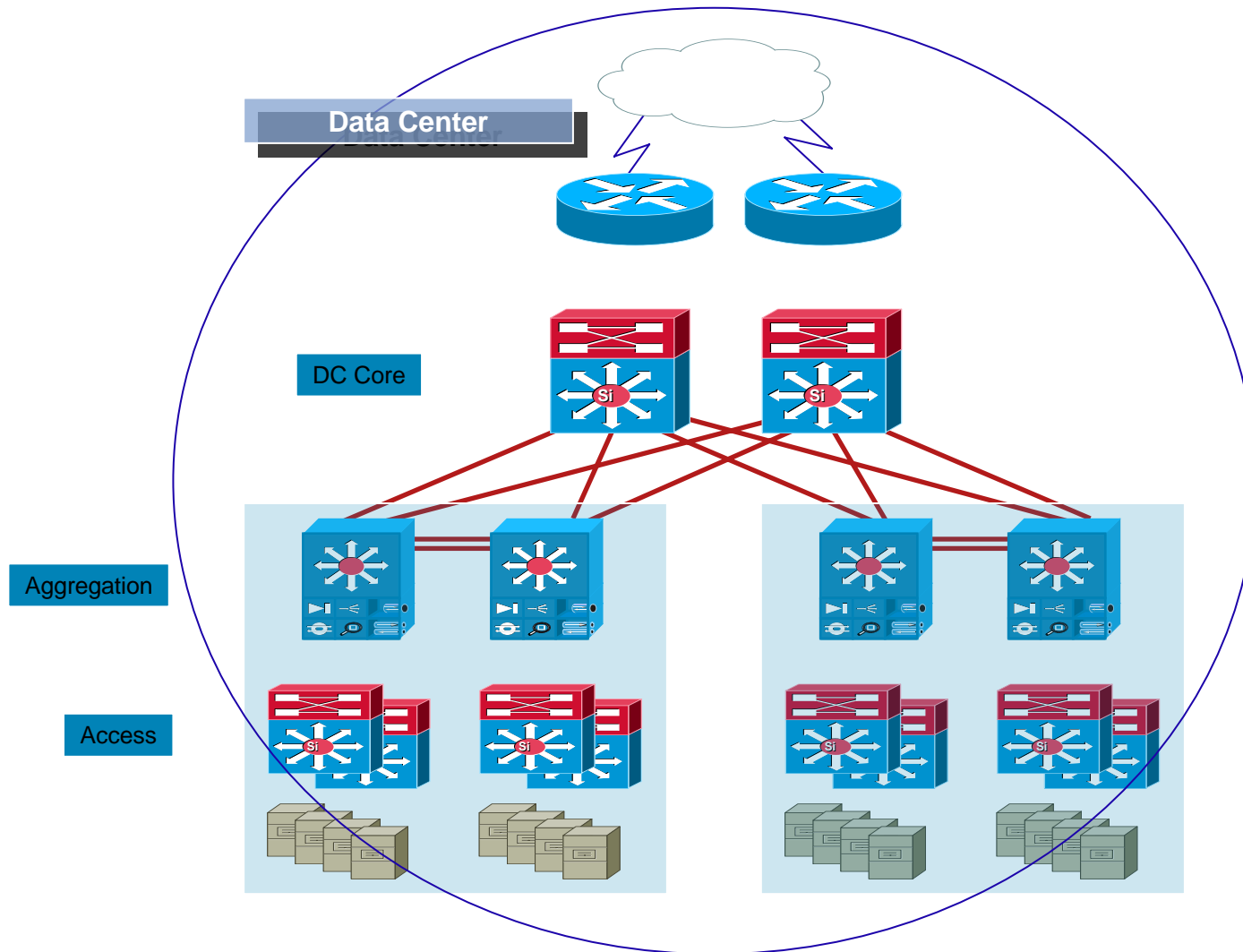
Cisco DCN Engagement Activities

- High-Level Standard DC Designs Generated
- Final DC Design Review with client teams
- Low-Level Standard Designs Generated
- Provided Migration support to new standard design at all three datacenters
- Weekly DCN Activity meetings and Bi-weekly Bug review reports
- Proactive Device Software Codes Selection
- Escalation support for critical issues

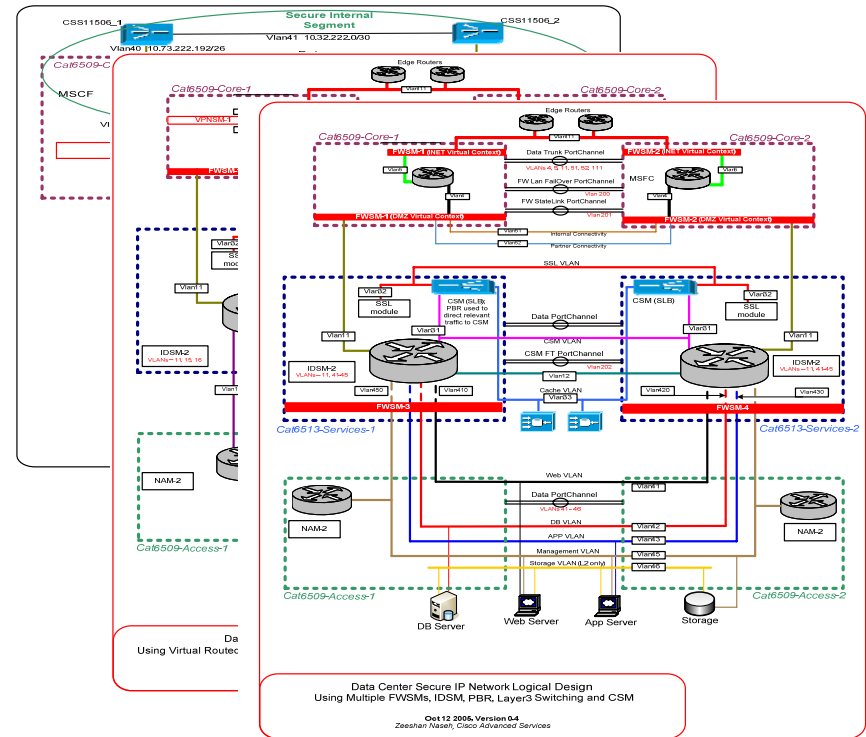
Cisco DCN Engagement Activities

- Cisco SW staging and problem duplication
- Proactively inform customer about new features
- Migration Planning and support for new High Availability solutions
- Quarterly Knowledge Transfer Sessions to help client team stay abreast of existing and new DCN technologies

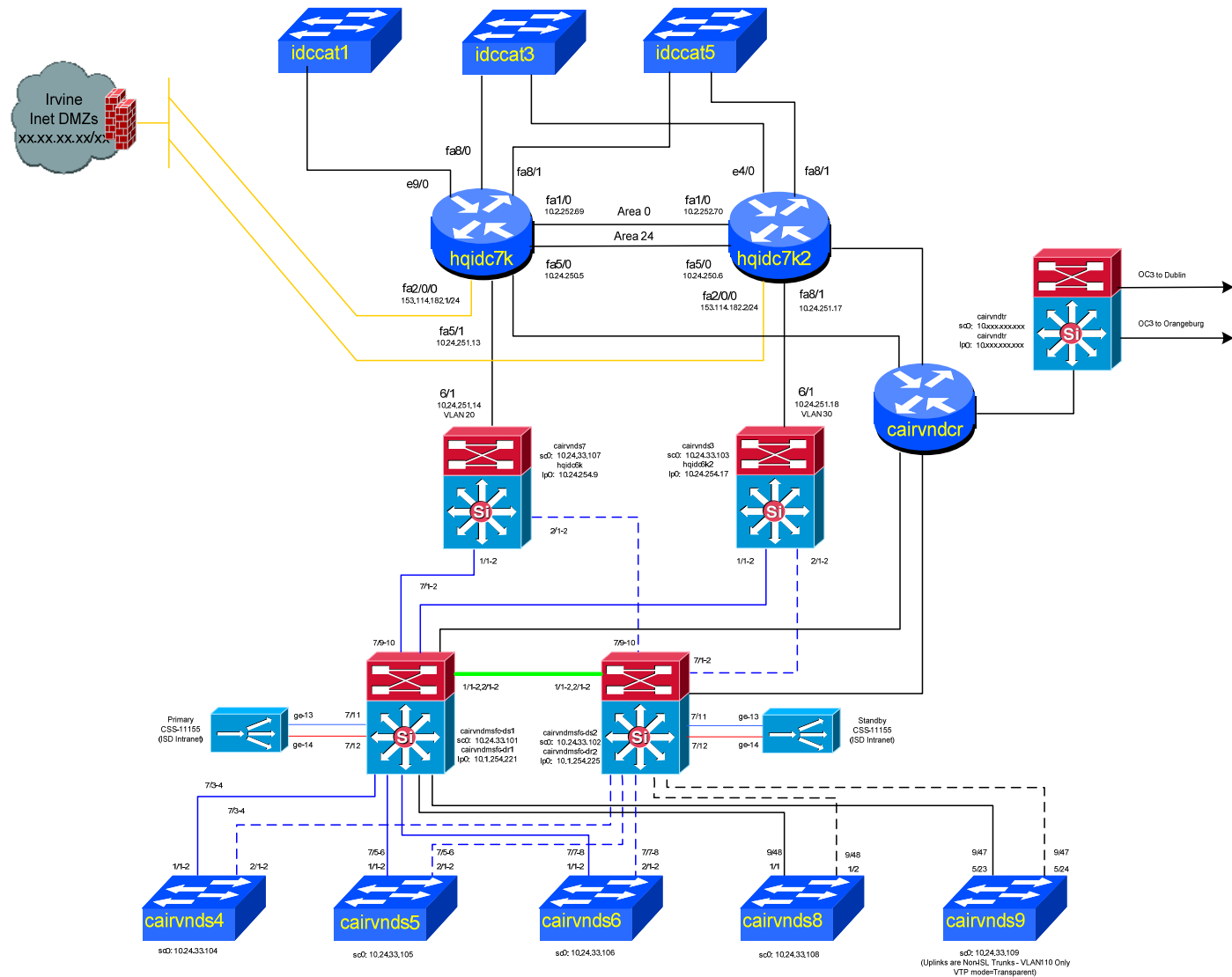
Physical Architecture Best Practices



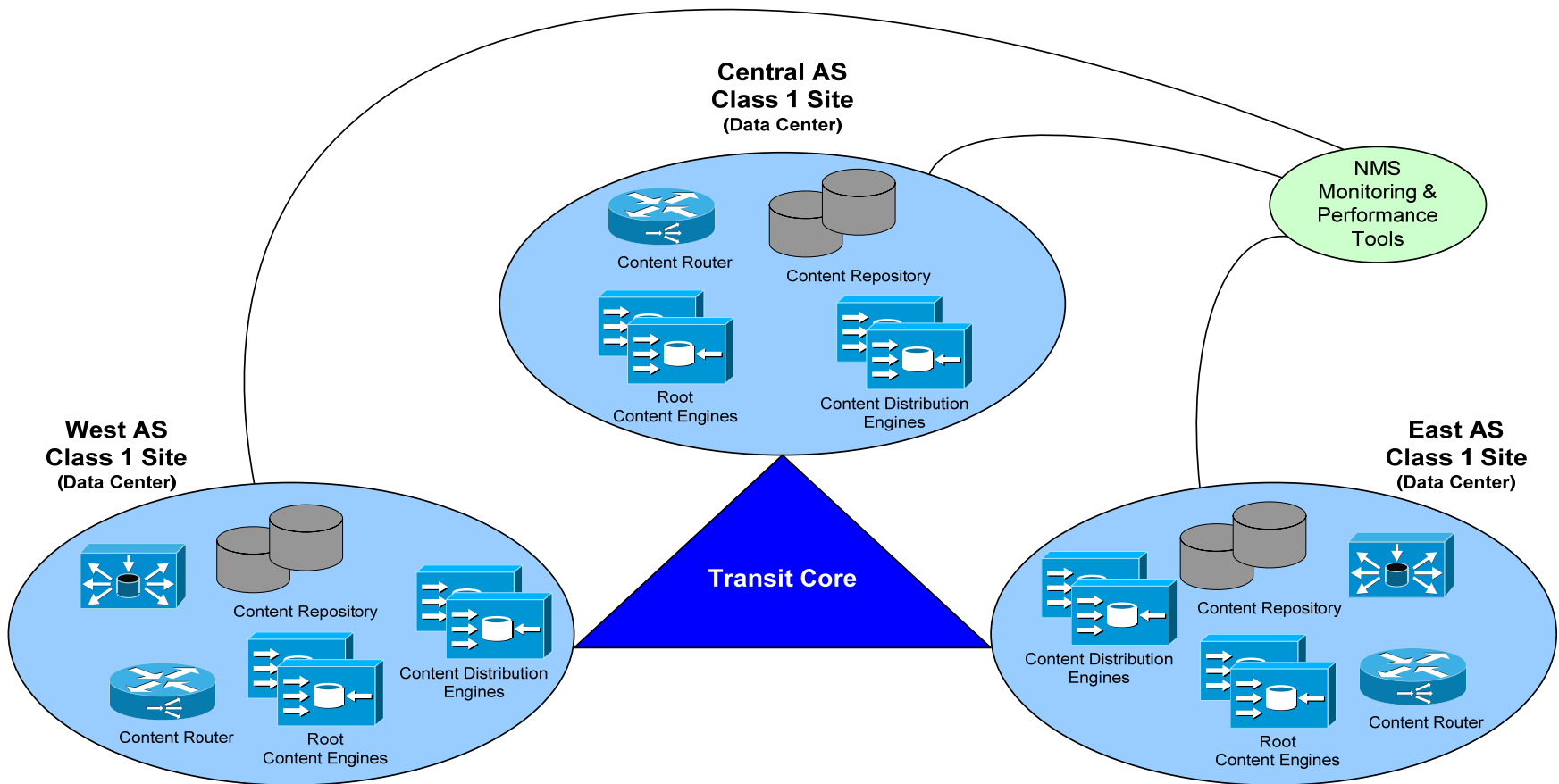
- Several Design Approaches Available – Chosen architecture is the one best for the Applications in the Data Center



DCN Standard Design



Video Network Data Center Design



Video Network Remote Site Distribution

