



21st Century Learning Environment



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The 21st Century Learning Environment

- Blurs the line between traditional learning methods and technology-enriched learning
- Lets learners choose and use resources that make sense to them
- Eliminates barriers to people, resources, and information
- Integrates on- and off-campus education resources
- Already exists



On- and Off-Campus Resources

- Next-generation libraries
- Smart classrooms
- Campus commons and dorms
- Flexible science labs
- Virtual museums
- Video zoos
- Research institutes
- Connected hospitals



Use of Virtual Reality and Gaming

- Second Life

 - Visit museums

 - Discuss book with author

 - Attend concerts

 - Participate in political campaigns and debates

 - Go to libraries, science centers, campuses

- Gaming applications

 - Chemistry

 - Business



Challenges for Education

- Student expectations for technology support
- First to feel the impact of new technologies
- Integration of new technologies into existing infrastructure and processes
- Assessment of learning outcomes
- Commitment of leadership
- Viability and long-term relevance



Five Steps To Transformation

Step 1	Create a compelling vision of 21 st century learning
Step 2	Connect all buildings and provide secure internal & external access to critical information
Step 3	Develop staff & teacher proficiency and enhance productivity
Step 4	Create student learning environments for network-based instruction and technology based opportunity
Step 5	Build a Community for student-centered learning and collaboration

Step 1



Create a Compelling Vision

Understanding Your Institution's Needs and Gaining Consensus

- Educational Goals
- Mission
- Departments:
 - Curriculum & Assessment
 - Technology
 - Professional Development
 - Human Resources
 - Facilities
 - Transportation
- Funding
- Support from Board and Community

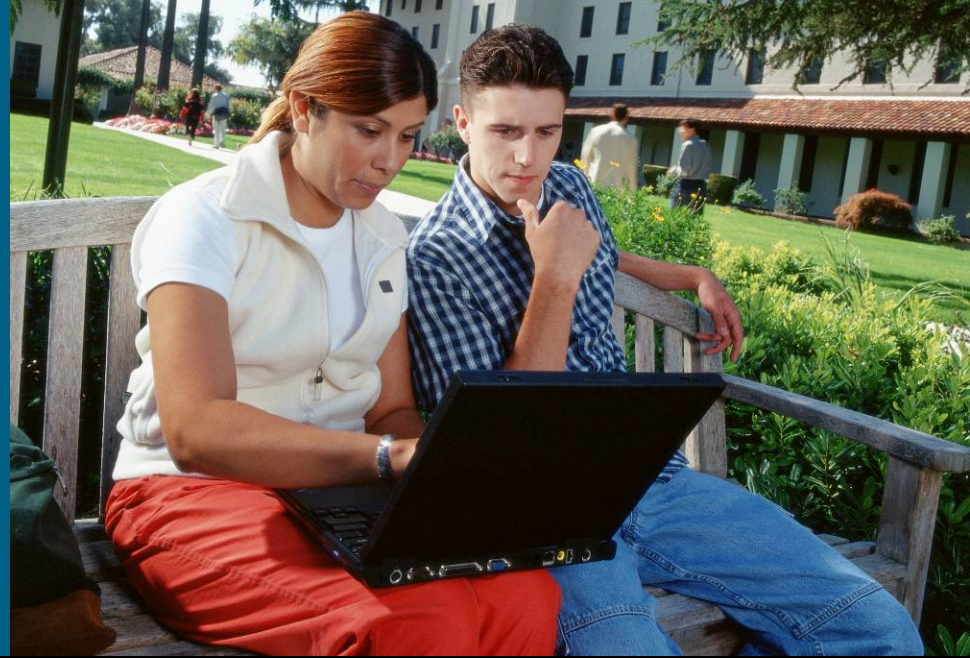


Benefits of Building the Vision

- Develops inter-departmental, administration and community consensus
- Establishes strong partnership with staff, students, parents and community
- Articulates long term plan that addresses:
Support, scalability and sustainability
- Differentiates your institution from other
- Creates new support opportunities for institution as “hub” and economic driver in the community



Step 2

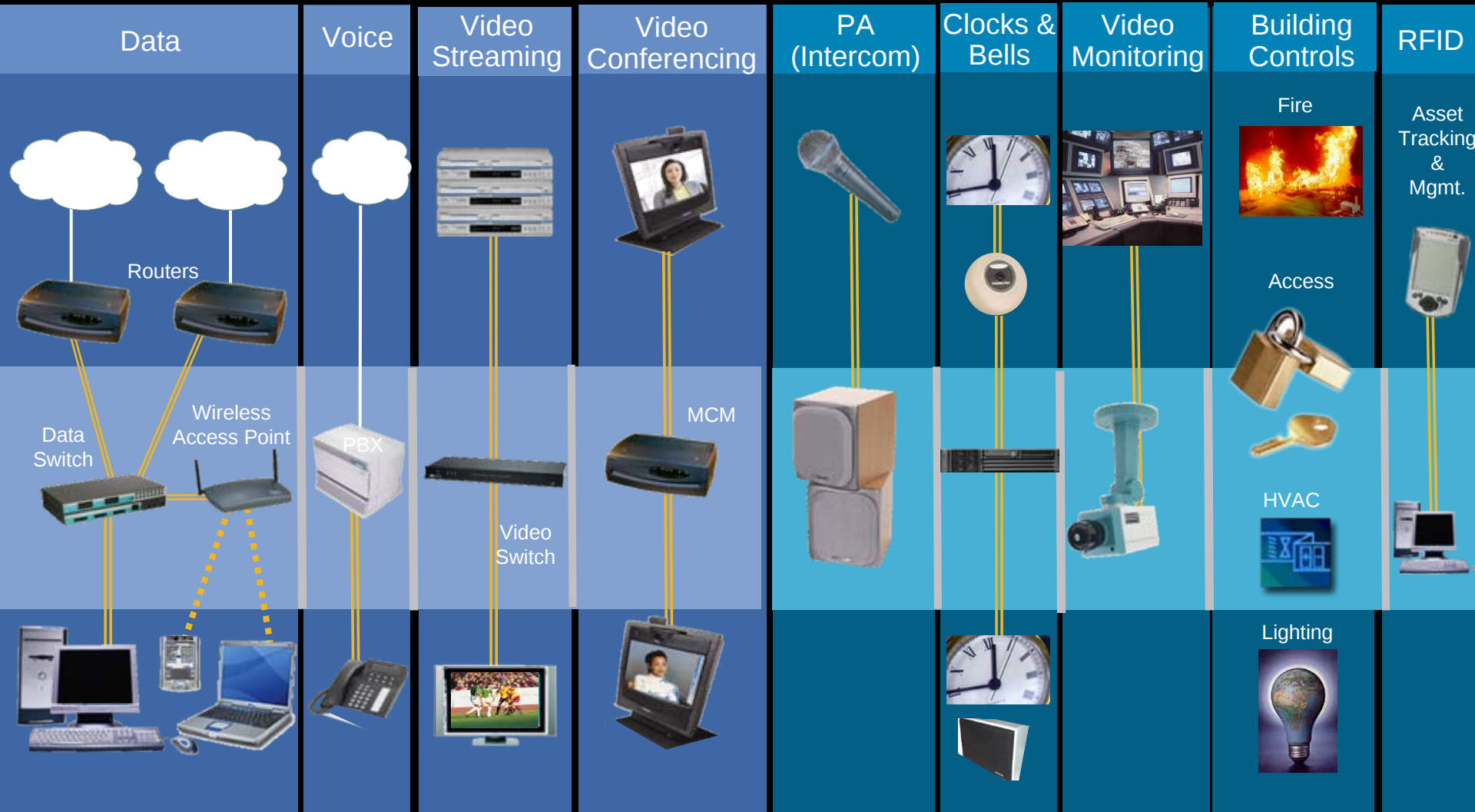


Connect All Buildings

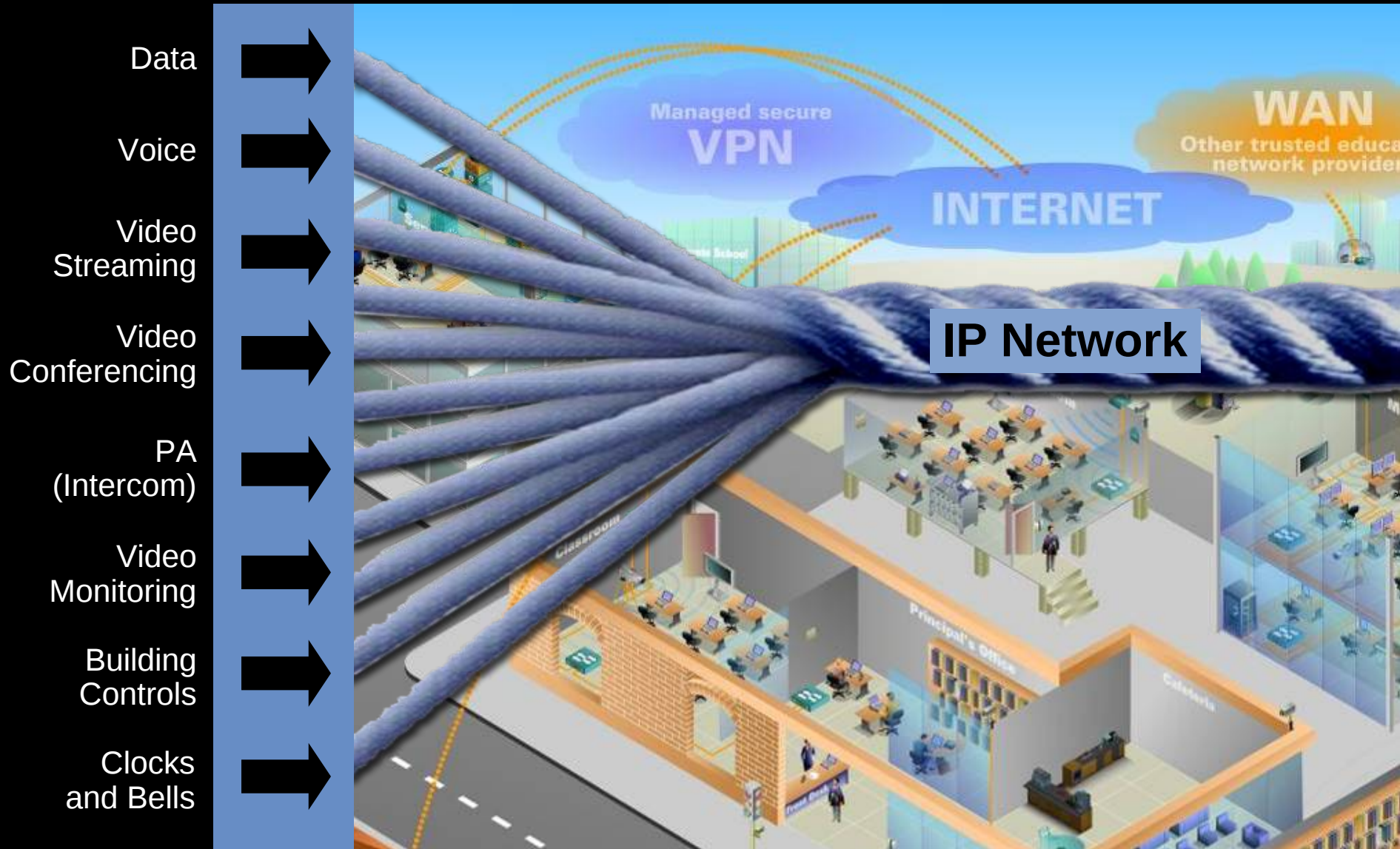
Multiple Systems

Faculty Workspace and Administration

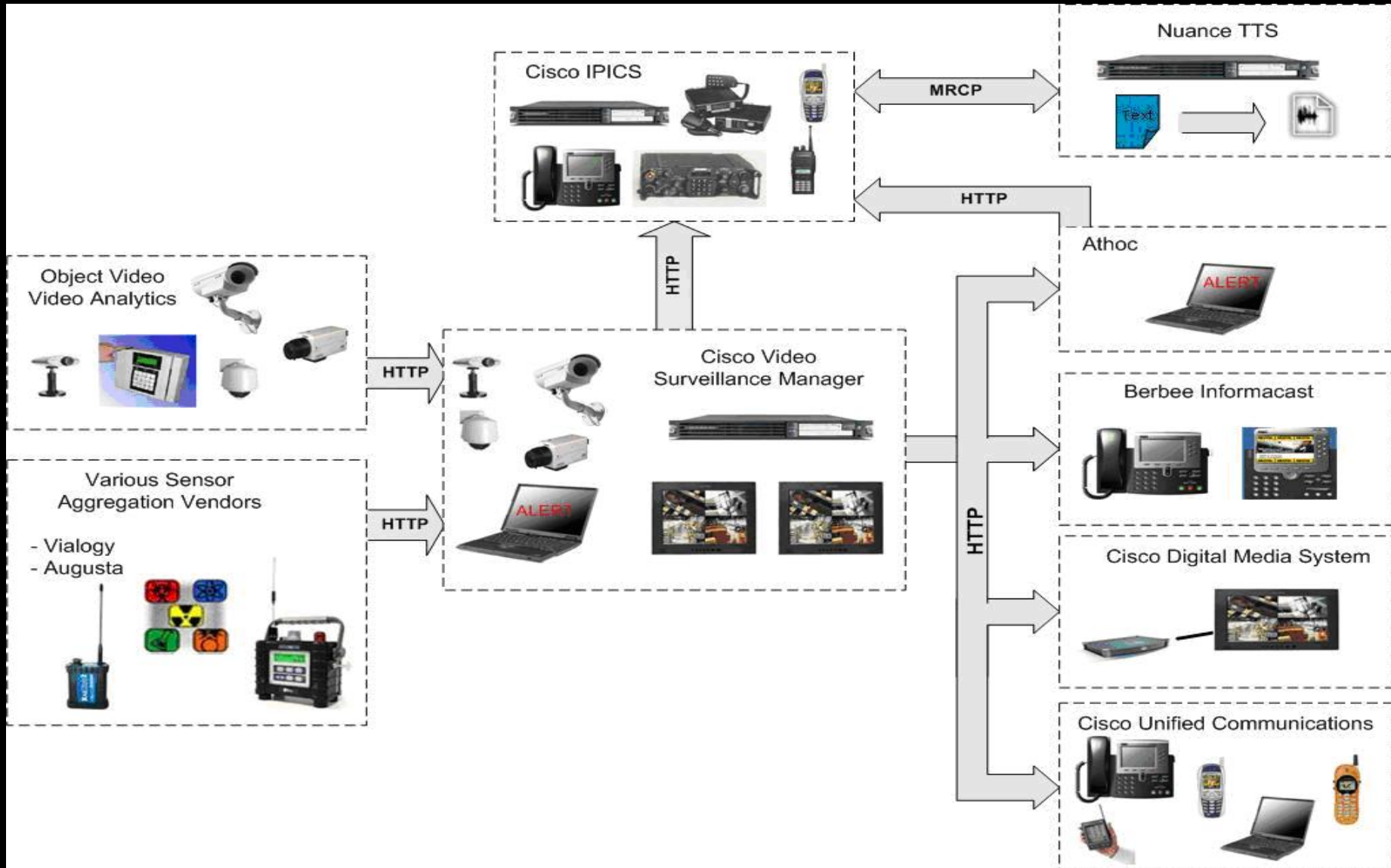
Facilities



Connect All Buildings

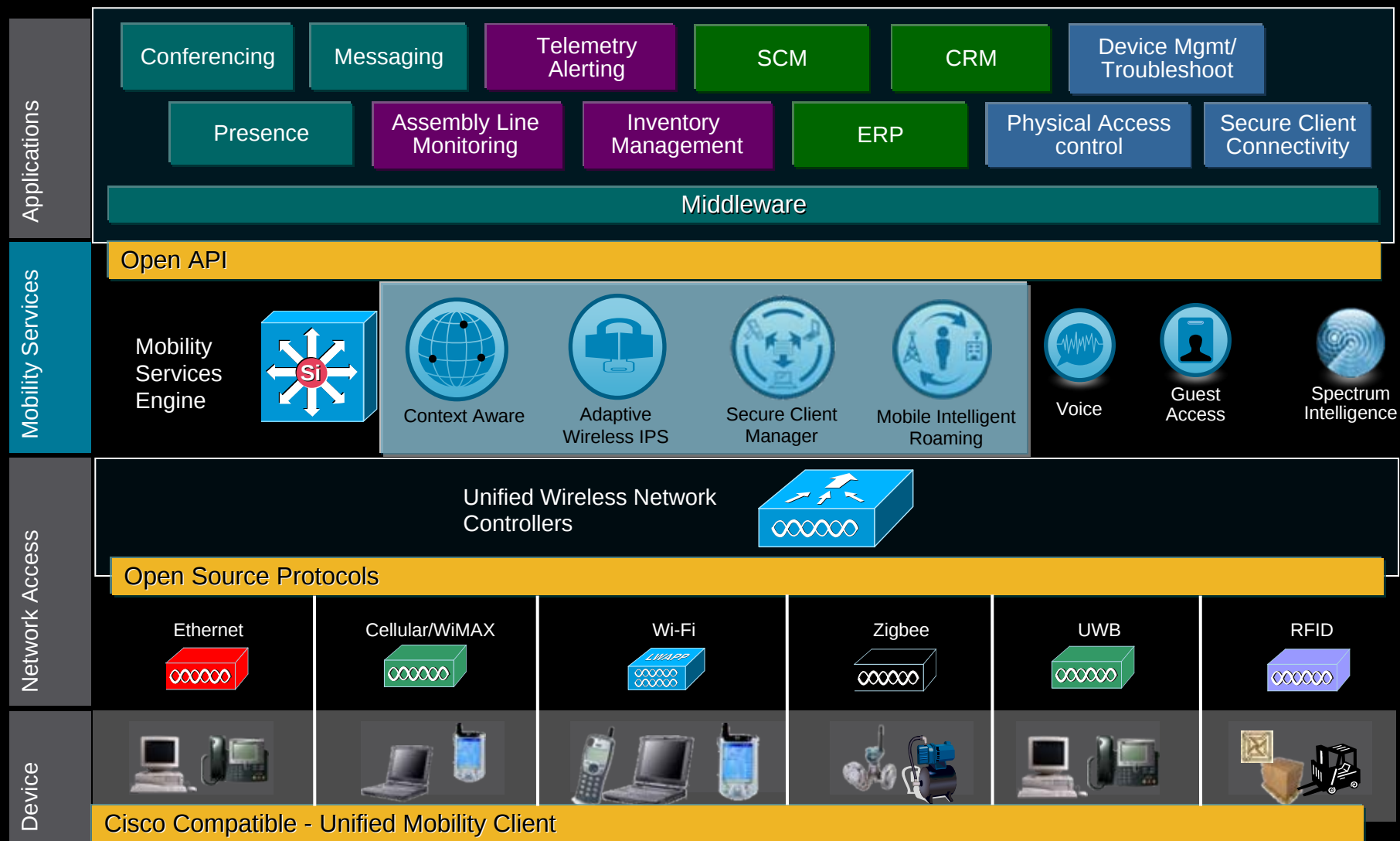


Secure the learners' environment



Cisco Mobility – Anytime, Anywhere, Any device

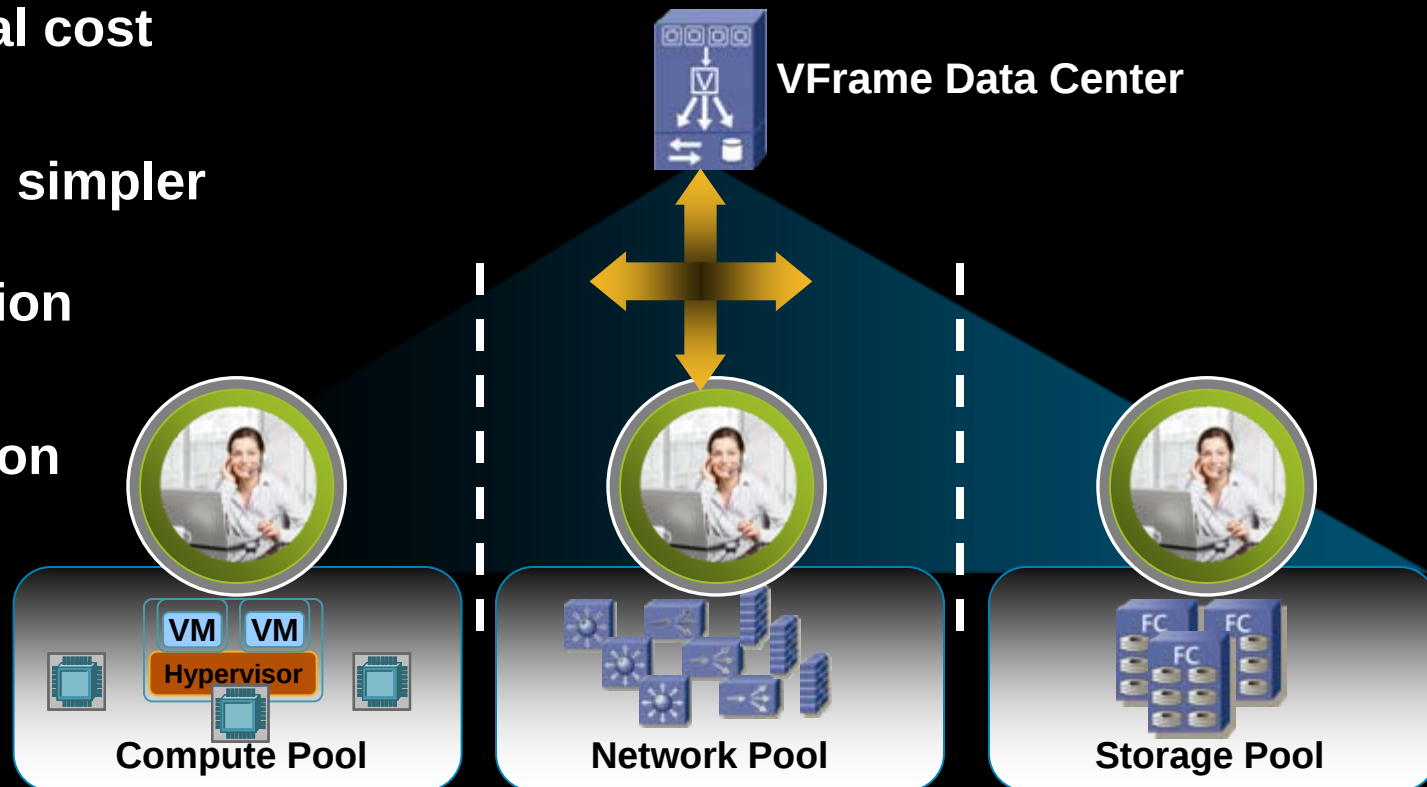
Unifying the Mobility Network



Next Gen Data Center : Network-Driven Service Orchestration

Coordinated provisioning and reuse of
physical and virtualized
compute, storage, and network resources

- Operational cost savings
- Faster and simpler service orchestration
- Robust virtualization scale-out

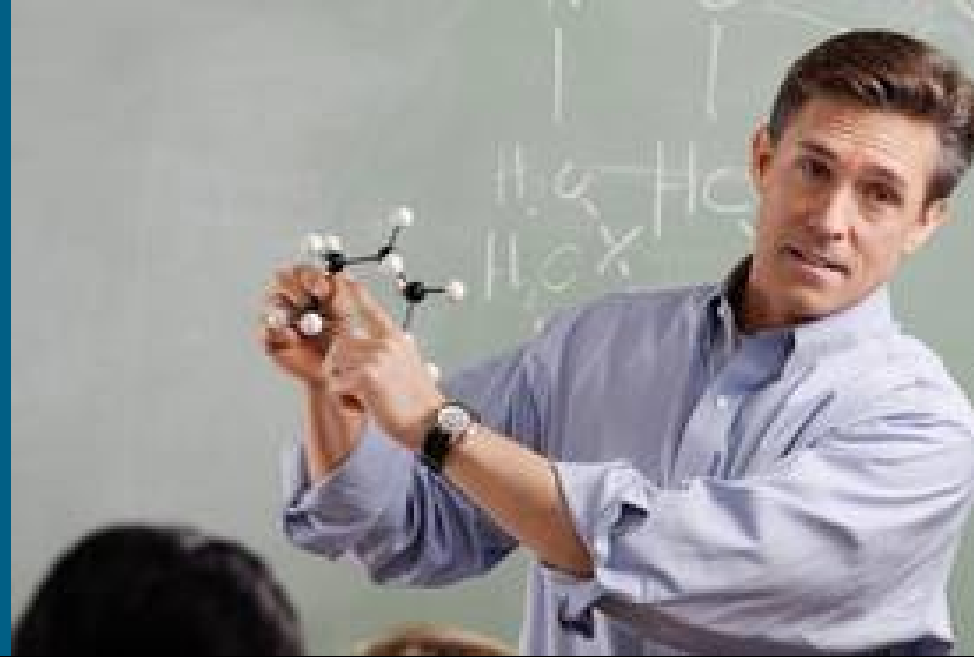


Benefits of Connecting the Schools

- Provide wired and wireless secure access to important data by authorized users anytime, anywhere
- Reduced number of wiring runs, management systems and expert resources
- Elimination of or reduction in operating costs
- Flexibility for your network to evolve as student population expands or declines
- Ability to offer new enhanced services



Step 3



Develop Staff and Teacher Proficiency

Empower Teachers with Technology

- Applications
 - Curriculum portal/software
 - Grade books
 - Student Information Systems
- Devices
 - Interactive white boards
 - PDA's
 - Touch screens
 - Laptops and/or tablet PCs
 - IP phones with communication applications
 - Projectors
 - Video conferencing/on demand
- Robust professional development



Benefits of Empowering Teachers

- Allows teachers to master technologies first, and then assimilate them into the classroom
- Integrated systems and curriculum, offer 24-hour access to data, opportunity for collaboration and best practice sharing
- Automates time consuming processes for more time with students
- Provides tools for teachers to create engaging learning environments



Step 4



Create Student Learning Environments

Student Centered Productivity

- 21st Century Skills
- Fluent users of Word Processing, Excel, PPT, Digital Integration
- Internet based Research
- Collaboration
- Anywhere, Anytime, *Anyway* Learning



Expanding the Classroom

- Video Conferencing
- Video on Demand Courses
- Video Streaming
- Digital Production



Expanding the Resources

- Centralized Resources:
“Digital MarketPlace” Model
 - Amazon + iTunes
 - Smaller, Relational Portions of Specific Content
 - Media Rich
 - Rating and Ranking
 - Curriculum Builder
 - LMS Integration
- Publisher/Content –
Direct Correlation to National/State
Standards and Testing



Cisco TelePresence

- Collaborative research
- Administration and cabinet meetings
- Dissertation defense
- Campus interviews
- Professor office hours
- Student collaboration
- Distance learning
- One-on-one classes
- Cross-campus meetings



Cisco Desktop Video: Delivery of Live and On-Demand Video

Classroom Video/Distance Learning

Replace “Pushcart VCRs” with the Video Portal—extend the classroom and use video for College prep courses, missed classes, specialized virtual classes



Administration/Community Communication

Video on-demand for staff communication and community updates/information

School Event Broadcasts

Broadcasting videos of sporting events, graduation, theatrical productions, school board meetings



External Marketing

Provide video on-demand for potential students, donors, etc. to learn more about the school offerings and to position as a leader in technology

Cisco Digital Signage: Deliver Real-Time Schedules, News, and Information

Daily Updates/Promotion of Special Events

Highlight special events or information specific for that day and time such as schedule changes. Replace posters/flyers.



Directional

Digital campus maps that can be updated as necessary for various events such as sporting events, graduation, guest speaker events



Safety/Emergency Broadcasts

Instant and scalable notification and evacuation information



Step 5



Build a Community

Create 21st Century Learning Environments

- Live or on-demand
- Distance learning programs
- Simulations and virtual environments
- Collaboration and content creation
- Video/Rich Media
- Assessment and prescriptive learning



Extend to the Home

- On-Line Services

- Access to Curricular Material

- Access to Homework Files

- Access to Attendance and Grades

- Access to School/Home Financial Info

- Bus Passes

- Text books, Library Books

- Fees & payment

- Directories and Email

- Access to meetings, conference calls

- Collaborative Community Input



The Benefits

- Creates individualized education model for both students and teachers
- Expands breadth and depth of curriculum and professional development offerings
- Enables effective learning at any hour of the day or night, from anyplace, on or off school grounds
- Promotes lifelong learning



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Fact of the Matter...

- Technology is here to stay
- Technology will continue to accelerate and evolve rapidly
- Each generation of students will bring newer technologies
- Institutions are at the forefront and need a strategy to plan for and adapt to new technologies



Recommendations...

- Enable all learning resources
- Stimulate a culture of inquiry and exploration
- Inspire self-service learning outside campus boundaries
- Applaud experimentation with new mediums and technologies
- Encourage students to customize and take control of their learning experience



