NC Education Cloud Kickoff Meeting
Feb 9, 2011
RttT Pillars

• Data Systems to Support Instruction
  • Instructional Improvement System: Angela Quick
  • State Data use, Adam Levinson

• Standards and Assessments, Angela Quick

• Great Teachers and Leaders
  • Professional Development: Lynne Johnson
  • NCVPS expansion, Bryan Setser

• Low performing schools: Pat Ashley
  • Transformation support system

• State Success Factors
  • Technology Infrastructures and Resources, Phil Emer
    • Cloud infrastructure, tools, and resources to support all RttT initiatives
  • Evaluation and policy analysis, Martez Hill
NC Education Cloud

- Shared Infrastructure Services
- Service Delivery Platforms

NC Education Cloud
Shared Infrastructure

X-as-a-service

Where “X” is Infrastructure or Software or Desktop or …
## A Platform for All RttT Initiatives

<table>
<thead>
<tr>
<th>Learning Management System</th>
<th>IIS</th>
<th>State Data Use</th>
<th>Standards &amp; Assessment</th>
<th>PD</th>
<th>NCVPS</th>
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RttT Technology Snapshot

End Users (Students, Teachers, Staff)

- NCVPS $6M
- IIS $24M
- Admin Apps

- User Devices $25.5M
- LEA Network $48.5M

- LMS/CMS $10.8M
- Learning Objects Repository $1.7M
- Collaborative Tools $4.4M
- Identity Management $1.2M

- Shared Infrastructure $11.2M

Hosting Provider Data Centers

- Cloud Infrastructure
- Cloud Platform
- LEA Infrastructure
NC Education Cloud end game...

- LEAs pay substantially less as part of a buyers’ consortium
- A shift in emphasis from technology support to instructional support
- Increased IT efficiency – fewer more highly utilized servers and other resources
- Increased service reliability – servers hosted in professional data centers with backup, DR, and service level guarantees
A District Deploying an Infrastructure and Platform to meet its strategic goals on their own

A District With No Change In IT Spending or Operating Model
Infrastructure Systems
Costs over time

District With Extensive Infrastructure

District With Basic Infrastructure

Cloud

Build/Migrate

Operation
Platform Systems
Costs over time

Small District

Large District

Cloud

Build/Migrate

Operation
Operational Model
Costs over time

Cloud

One Time Spending Capital Investment

E-Rate Eligible Services
Collaborative Procurement
Cost Avoidance
Cost Reduction
Flexible Funding Models

Build/Migrate

Operation
Organization & Collaboration

DPI Leadership Team advises SBE/GETC

Program Director

- Project Management
- Application workload testing
- Site surveys and inventory
- RFP - vendor specifications
- E-rate and CIPA
- Planning & Design

LEA Working Groups

- Infrastructure Working Group
- Platform Working Group
- Service/Project Specific Working Groups
NC Education Cloud Advisory Process

- **Strategic level advisory committee**
  - Membership=16, 2 per Region
  - Reflects cross section in Regions by LEA size, function and position
  - Longer term strategic role envisioned

- **Project specific working groups**
  - Membership size will vary
  - Shorter term
  - Infrastructure blueprint, platform, consortium buying, identity management
The RttT Technology Project Team

Cloud Team

The Friday Institute
Sammie Carter, Systems Architect
Larry Creglow, Project Facilitator
Lee Sartain, Policy Specialist

MCNC
Dave Furiness, Director CNE
Steve Thorpe, Systems Analyst

NCSU ITng Lab

NC ITS
Bob Giannuzzi, Project Management

NCVPS
Chanin Rivenbark, CTO
Nathan Thanos, LMS Admin

Program Director
Phil Emer

DPI
Peter Asmar

Adam Levinson

Cloud Services
NEW

Instructional Tech
Neill Kimrey

Network & E-rate
Ed Chase

PM Office
Jerry Bunn

PM Office

Jerry Bunn

PM Office
• Gather resources.................1/15/2011
• Initial Site interviews.........4/18/2011
• DRAFT plan.......................5/1/2011
• Approved Plan.....................6/1/2011
  (Dependent on other Pillar schedules)
• Complete site interviews..7/1/2011
• RFPs........................................2\textsuperscript{nd} half 2011
• Deploy services....................4Q2011-1Q2012
• Migrate and operate............4Q2011-4thQ2014
Methodology

• Build the team
  • Assign functional areas of early investigation
    – Identity management
    – Systems architecture & infrastructure blueprint
    – Platforms for instruction & administration

• Gather information
  • Internal
    – LEA site interviews
    – Other Pillar Plans
  • External
    – Interview & inform vendors & providers
    – Identify & inform partners
Methodology cont’d

• Develop the Plan
  • Draft and review
  • Community vetting
  • Plan approval

• Collaborate Communitywide
  • Ongoing messaging evolution
  • Consistent to:
    – LEAs
    – DPI & other RttT teams, organizations
    – External as required

• LEA Advisory Committee & Working Groups
• **Community Meetings:**
  • **Internal:** Consistent and frequent updates at: webinars, Quarterly RESA & TD Regions, DPI leadership, Pillar initiative teams, NCTIES, NCET
  • **External:** Vendors, providers, partners, COSN, peer state education organizations

• **Web site**—place for FAQ, Guidelines, Presentations, Organization, Team members, news, links to DPI & others: [http://cloud.fi.ncsu.edu](http://cloud.fi.ncsu.edu)

• **LEA Advisory Committee & Working Groups**
• **LEA site interviews**
Site Interviews

- **Objectives**
  - Communications/community education
  - Data collection to support NC Education Cloud plan development
  - Community buy-in
- **Process Summary**
  - Develop on-line data collection survey/form – leverage previously conducted surveys
  - DPI Regional Instructional Consultants schedule site interviews
  - Pre-populate survey with known information where appropriate
  - Distribute link to survey to LEAs
  - LEAs review the survey prior to the site interview
  - Conduct site interviews – complete data collection
    - Interview team typically - Dave Furiness, DPI Instructional Consultant, Contractor - Systems Consultant
    - LEA participants – CTO/Technology Director and designated staff, Media & Instructional Technology leadership, and CFO
    - Ed Chase, Neill Kimrey, and/or Phil Emer will participate in five largest LEA site interviews - Wake, Charlotte-Mecklenburg, Guilford, Cumberland, Winston-Salem/Forsyth
Site Interviews

- **Data Collection Schedule**
  - **Phase 1** – 48 LEA site interviews scheduled

<table>
<thead>
<tr>
<th>Region 1:</th>
<th>Martin</th>
<th>Washington</th>
<th>Camden</th>
<th>Currituck</th>
<th>Perquimans</th>
<th>Edenton/Chowan</th>
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<td>Region 2:</td>
<td>Wayne</td>
<td>Sampson</td>
<td>Greene</td>
<td>Craven</td>
<td>Carteret</td>
<td>New Hanover</td>
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<td>Region 3:</td>
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<td>Franklin</td>
<td>Vance</td>
<td>Granville</td>
<td>Wilson</td>
<td>Nash-Rocky Mount</td>
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<tr>
<td>Region 4:</td>
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<td>Moore</td>
<td>Hoke</td>
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<tr>
<td>Region 5:</td>
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<td>Orange</td>
<td>Rockingham</td>
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<td>Region 6:</td>
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<td>Gaston</td>
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<td>Cleveland</td>
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<td>Region 7:</td>
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<td>Yadkin</td>
<td>Avery</td>
<td>Hickory</td>
<td>Burke</td>
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<tr>
<td>Region 8:</td>
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<td>Swain</td>
<td>Buncombe</td>
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- **Phase 2 & 3 LEA site interview schedule TBD** – completed by July 1, 2011

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