NC Education Cloud

The Race to the Top

IT Infrastructure Program

February 21, 2013

http://cloud.fi.ncsu.edu

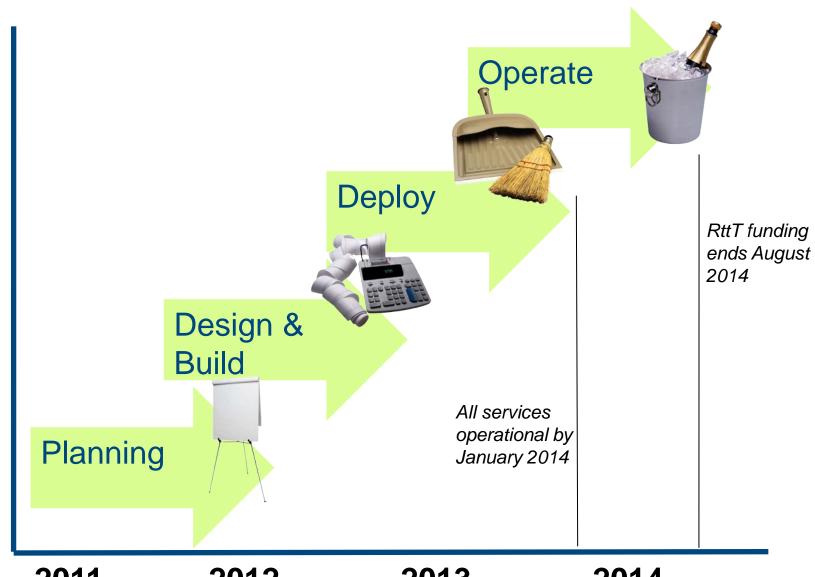
Phil Emer, The Friday Institute
NC State University

paemer@ncsu.edu

NC Education Cloud Basics

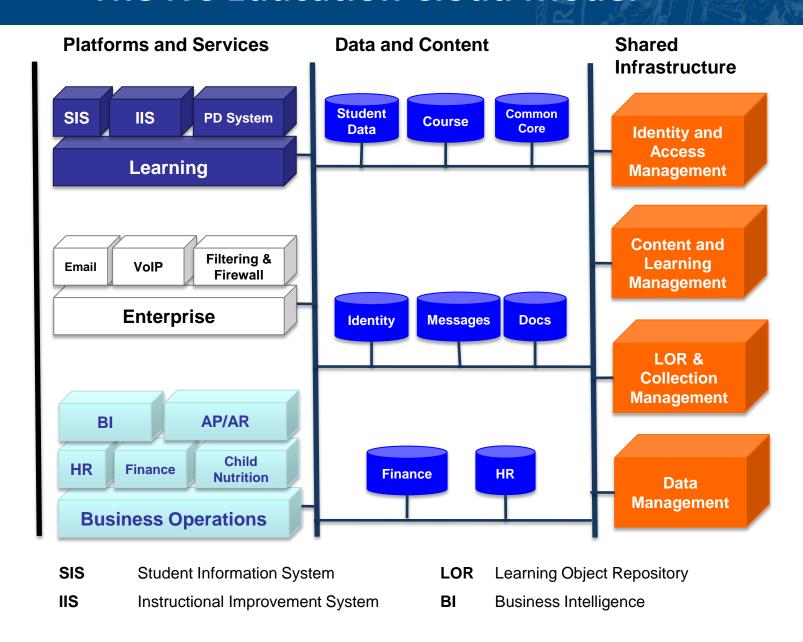
- The end-game is individualized instruction
- The cloud is plumbing, process, and supporting service
- De-emphasize buying and hosting infrastructure
- Emphasize procuring services
- Raise the bar on reliability
- Towards 24x7 access to services
- The cloud isn't the backup it's the primary
- Defragmentation fewer providers, more competition
- Avoid custom integration adopt standards
- Fill in the gaps
- Engineering approach

Process and Timeline



2011 2012 2013 2014 ₃

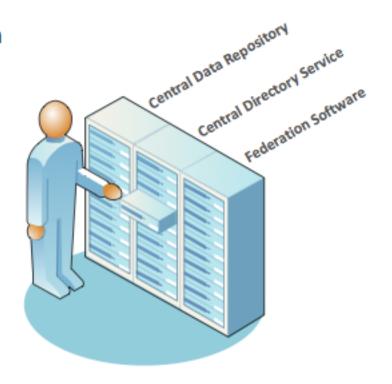
The NC Education Cloud Model



LEA Identity and Access Management

Identity and Access Management (IAM) System has 3 Major Components

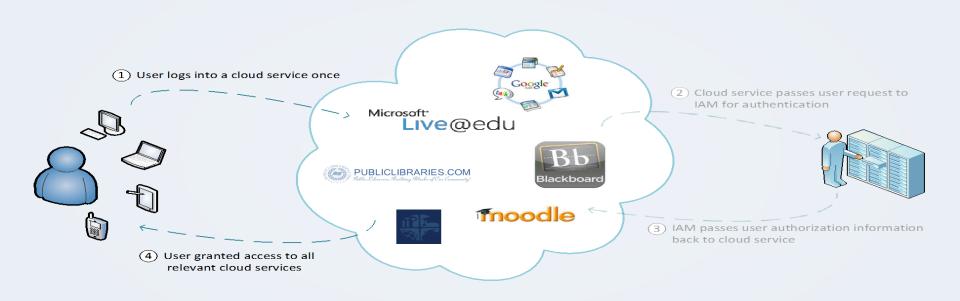
- Central Data Repository
 The central repository will be comprised of relevant user data from various authoritative data sources
- 2 Central Directory Service The central directory will contain all user IDs, passwords, and other identity information. It will serve as master authentication and authorization point for all cloudbased services and allow syncing to LEAs
- 3 Federation Software The federation software security extends identity information to cloud-based services providing end users with single sign on experience



Deploy this...

LEA Identity and Access Managment

...so teachers, students, and parents.can.do this...



Google Apps: http://www.google.com/events/smallbus_apps/images/apps_ring.jpg
Microsoft Live@EDU: http://www.microsoft.com/liveatedu/App_Themes/Default/img/liveatedu-logo.png NC Public Libraries: http://www.publiclibraries.com/piscom1.gif
Moodle: http://moodle.org/theme/image.php?theme=moodleofficial&image=moodle-logo&rev=248&component=theme
Blackboard: http://gma.tatute.flickr.com/3110/2828218796 fd66a1c428.jpg

NC DPI: http://www.dpi.state.nc.us/images/pixel.gif