



ISC Cloud First Program

RETROSPECTIVE

DECEMBER 5, 2017

*A long time ago, in a galaxy
Far, far away....
An edict went out among the
Penn ISC Community*

*Actually it was more like
18 Months ago....
But it seems a lot longer*

How did we get here?

- ▶ In the early part of calendar year 2016, Tom Murphy challenged ISC to take a "Moonshot" around the use of Cloud at Penn
- ▶ A small collaborative team was formed to brainstorm and come up with a framework for the effort

MISSION

POSSIBLE

We Can Do This!

“Moving Applications to the Cloud”







Moonshot

A lofty, aspirational goal meant to drive significant change in dramatic fashion







Penn IT Transformation – 2+ Decades



Penn's Trusted IT Partner

Mainframe

Distributed Systems (Decentralized Web-based self service on premises)

Software as a Service

1995

2000

2005

2010

2015

Payroll/HR
Students

Ben Financials
Penn InTouch
Data Warehouse

Penn ERA

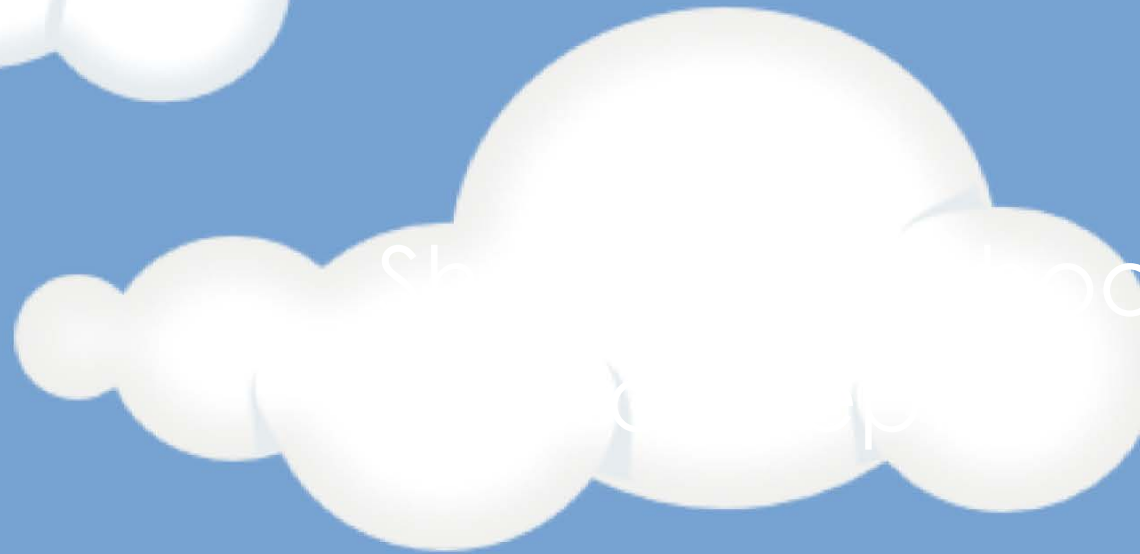
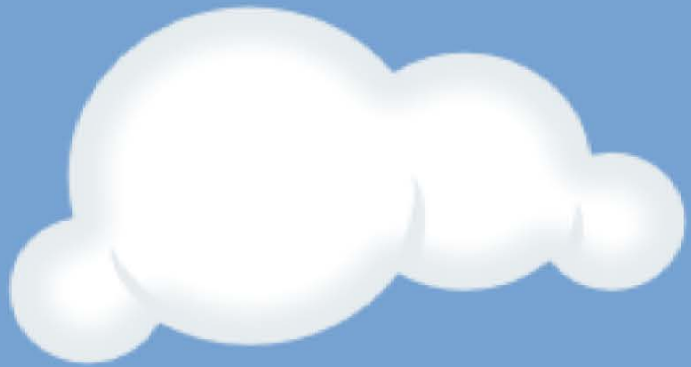
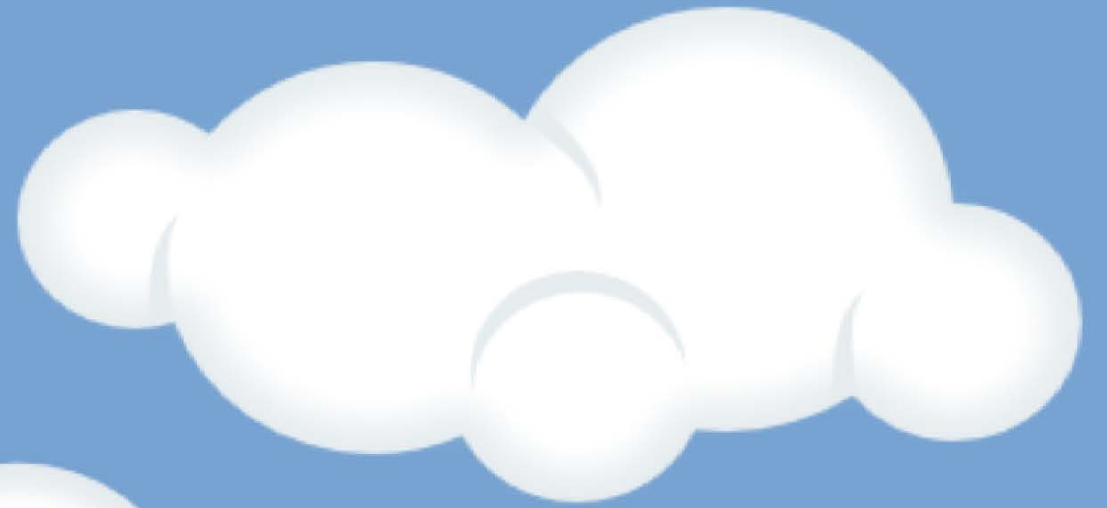
ATLAS
U@Penn
Ben MarketPlace

Oasis
PennWorks
Mobile PIT

Pennant

MS O365
Concur
Canvas
Slate
CollegeNet
HCM
Adobe





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**Commit to a
“cloud-first” strategy
for delivery of all
new services and
cloud-enable 80% of
all existing ISC
services by
March 2018**

Move to Blue



Academic
and Student
Systems

Research
Support
Systems

Business
Systems

Finance
Systems

Networking

Telecommunications

Security

Identity and
Access
Management

Collaboration

Client Cloud

Middleware
& Tools

Other?

IS THAT GUY CRAZY?

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Why Cloud First?

- ▶ Make it easier to choose Software as a Service options
- ▶ Make it easier for partners to work with us
- ▶ Re-envision the full technology stack for cloud-native agility
- ▶ Model and socialize iterative and transparent value delivery
- ▶ Automate or eliminate maintenance work
- ▶ Socialize and share what we learn

Program Vision

Vision

Position Penn for the future of IT systems and services by pursuing a “Cloud First” strategy to accelerate speed of delivery and to drive more value through technology to the Penn Community.

Program Objectives

Objectives

- Increase business application agility, scalability, and effectiveness
- Improve resource availability for higher value work
- Take advantage of economies of scale
- Challenge conventional approaches to IT at Penn
- Stay current with where technology is going
- Decrease capital spend over time (TCO)
- Increase availability
- Position Penn for the future

ISC's Cloud First Program at a glance

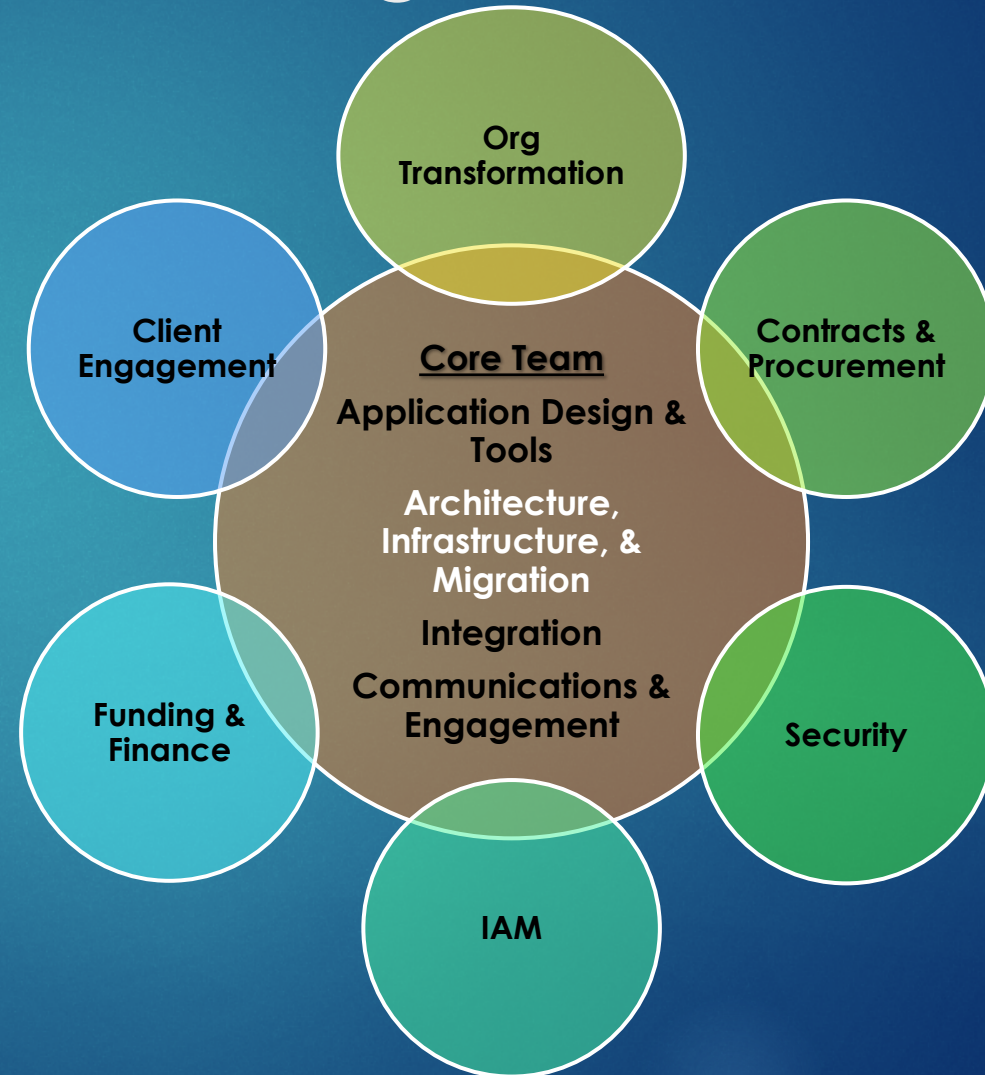
James Choate
Owner

Tiffany Hanulec
Architecture, Infrastructure & Migration

Bryan Hopkins
Application Design & Tools

Teresa Leo
Communications & Engagement

Janet Lind
Integration



Cloud First – By the Numbers FY17

- ▶ 250+ website links to cloud resources; also program updates, presentations, team pages, and program documents
- ▶ 25+ Presentations (Town Halls, SIGS, ITR, EVP, SUG, ISC etc.)
- ▶ 25+ Meetings with clients in Schools and Centers
- ▶ 9 Program updates to clients and ISC
- ▶ 4 Lunchtime Learnings (average attendance 100)
- ▶ 2 IT Staff Convention events (Hackathon, AWS Panel)
- ▶ 2 Cloud curriculum tracks (Infrastructure 19 courses and Development 26 courses)
- ▶ 2 Newsletter articles
- ▶ 2 Slack channels
- ▶ 1 Knowledge exchange with clients

What are our operating principles?



CLOUD FIRST PRINCIPLES

- Choose simplicity, speed, and iterative improvement over upfront completeness and strict controls.
- Continuously iterate and re-evaluate decisions; nothing is beyond question.
- Be mindful of increasing technical debt.
- Choose automated solutions over manual ones, but respect the implications to manual process owners.
- Use tools and technologies “off the shelf” in secure ways and as the provider intended.

Accomplishments



Panel Discussion