



# How we Build/Measure/Learn Moving to Cloud Cadence

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# Historical Context

Very large product

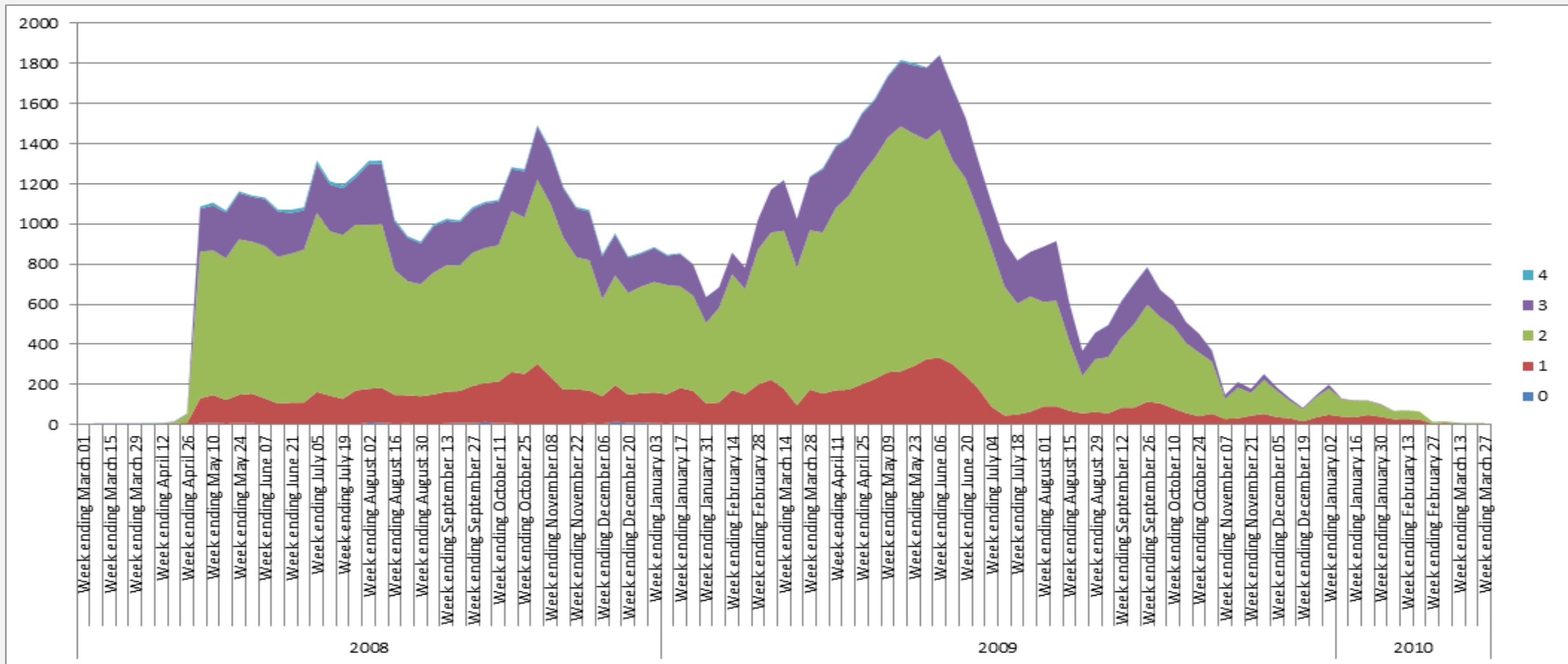
Very large organization

2 year product cycles

Mission critical product

A very adaptive organization

# TFS 2010



# Starting with Scrum

Team training

Sprint length

Ramp up

Anxiety

Scaling

# Cadence

12-18 Month vision

6 Month plan

2-3 sprint design

3 week sprint execution

Daily live site

# Activities

Envisioning

Pillar reviews

Experience reviews

Feature team chats

Sprint mails

# Organizing the Team

Cross functional

Shared accountability

Multi-tier

# Cloud Delivery

How often do you ship?

			Chat						Chat			
1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/12	3/19	3/26	4/2	4/9	
Sprint 26			Deploy				Sprint 28			Deploy		
Wk 1	Week 2	Week 3	Week 1	Week 2	Week 3	Week 1	Week 2	Week 3	Week 1	Week 2	Week 3	
			Sprint 27			Deploy				Sprint 29		



# Engineering System

Deployment

Managing quality

Code flow

Exposure control

Dependency management

Engineering backlog

# Deployment/Upgrade

Only ever 1 install in the cloud

Service interruption

Compatibility

Roll forward

Deployment retrospectives

# Managing Quality

Gated checkin

Rolling builds

Nightly builds

Sprint sign-off

Deployment validation

Testing in production

Walk-throughs

# Exposure Control

Feature flags

A/B testing

Incremental rollout

# Live Site Focus

Operations team

DevOps focus

Dashboard

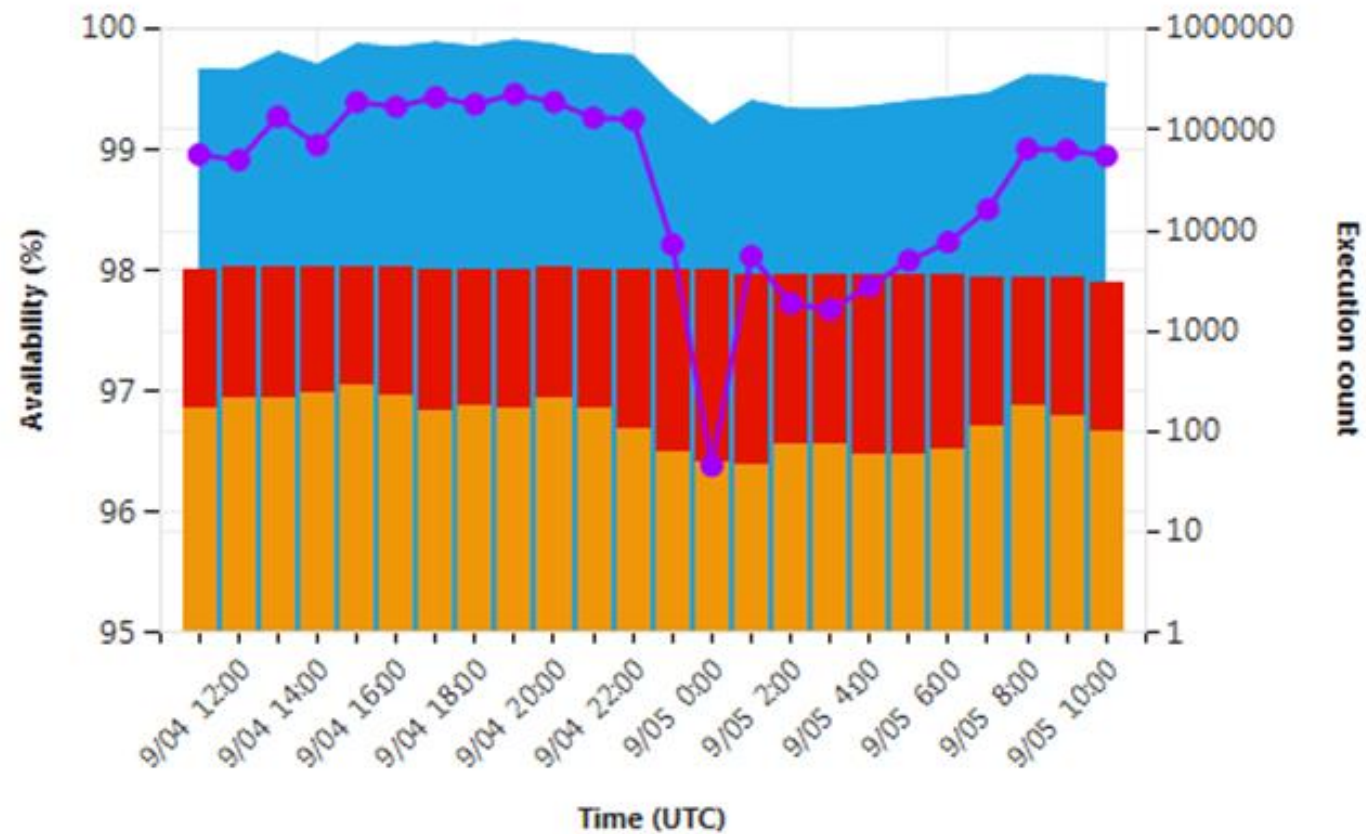
Monthly service reviews

Weekly live site reviews

Incident management

## Team Foundation Service availability\* (24 hours)

\* excludes expected failed and slow commands



refresh

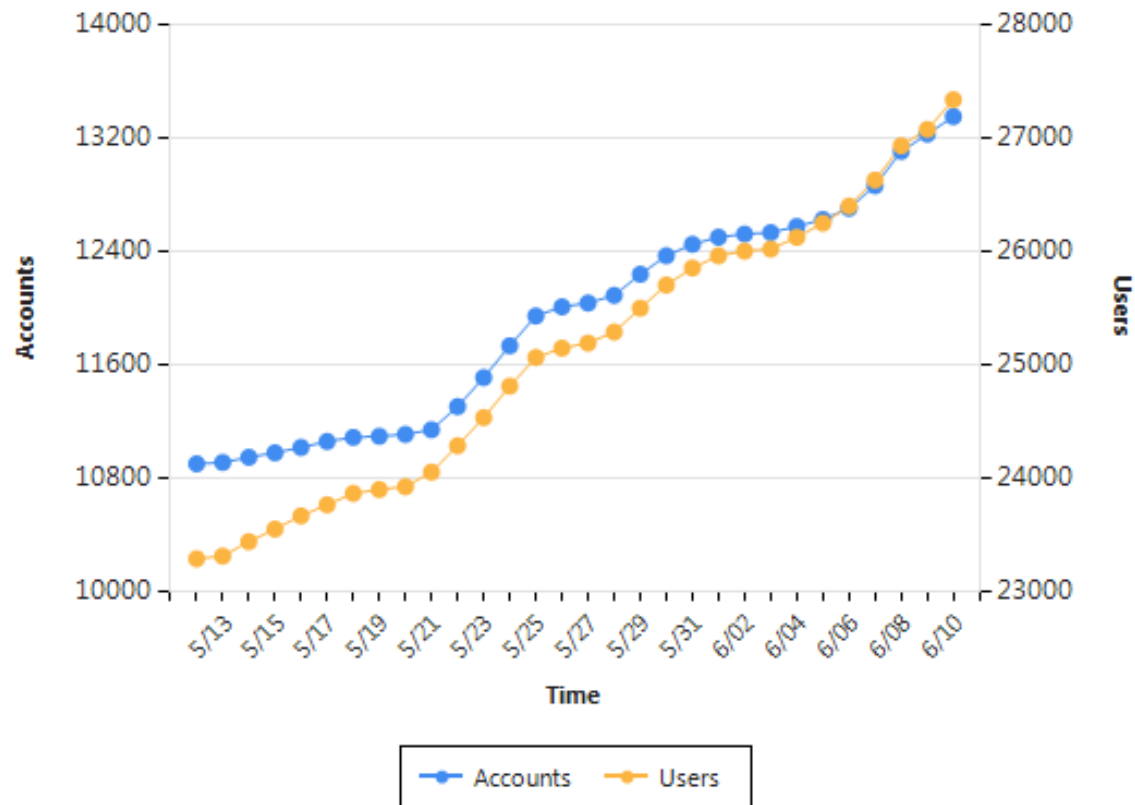
previous

resume

next

# Team Foundation Service dashboard

Number of accounts and users (30 days)



refresh

previous

resume

next

13742

total accounts

27822

total users

2464

30d total accounts

82

30d avg.  
account/day

393

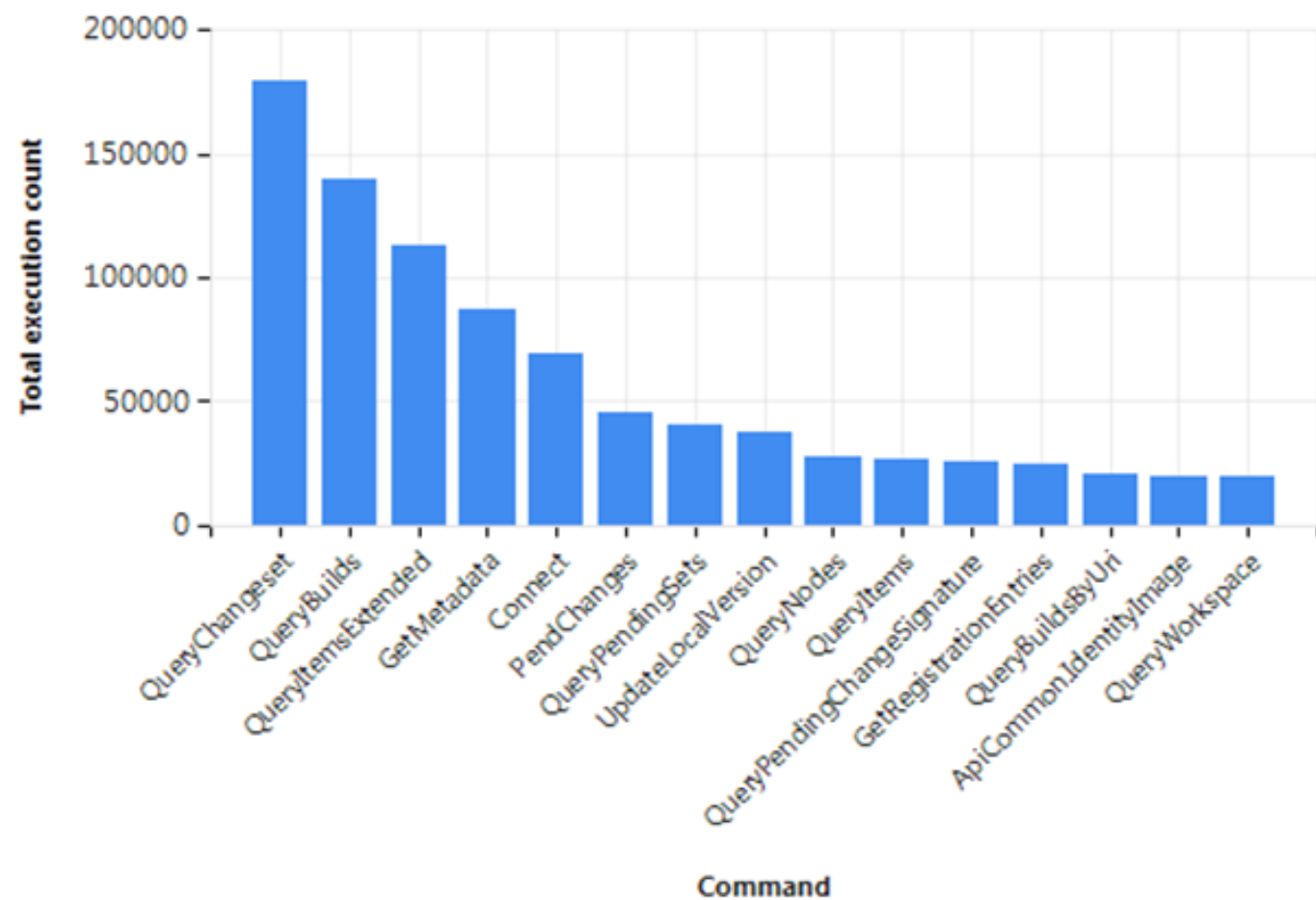
24h total accounts

2.02

user/account

## Top 15 commands\* by execution count (24 hours)

\* excluding download/upload commands (Ex: VCDownloadHandler, Upload, etc.)



refresh

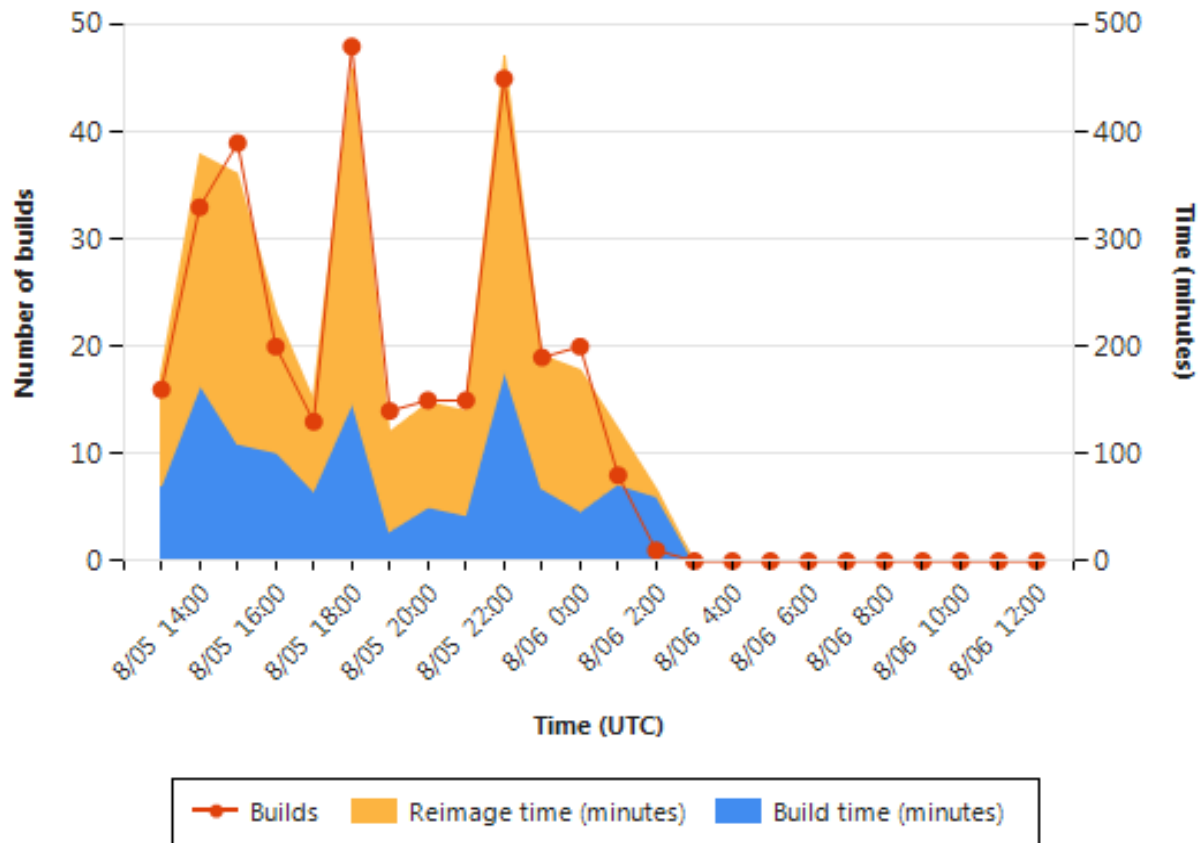
previous

resume

next



## Elastic build statistics (24 hours)



refresh

previous

resume

next

90.75%

24h build availability

292

24h build count

2s

24h avg. queue duration

12s

24h max. queue duration

29

machine count

27

24h build failures

Data cached at 08/06/2012 12:50:17 UTC.

# The Boxed Product

Much harder to address issues

Decided to align with cloud cadence

CTPs every sprint

Releases every quarter (4-5 sprints)

# Check it Out

<http://tfs.visualstudio.com>

