Application Discovery and Delivery Intelligence for z/TPF

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What is Application Discovery and Delivery Intelligence (ADDI)?

A bundle of Application Discovery (AD, formally known as EZSource) and Application Delivery Intelligence (ADI).

ADDI brings Cognitive Computing to your business critical applications.
video: https://www.youtube.com/watch?v=eemRl3osDbc

Unlock:	**Empower:**	**Appraise:**
Rapidly analyze and visualize your applications to make changes quickly	Improve productivity of new and existing resources through knowledge transfer and automated documentation	Continuously assess and improve quality against consistent metrics and enforcement of coding standards

Drive DevOps improvement with Analysis, Insight, and Optimization.

Analysis:
Rapidly identify areas of concern in your application portfolio, then assess the impact, scope, risk and actions required

Insight:
Improve the accuracy of your planning and estimating with insights gained from data collected and correlated from DevOps activities

Optimization:
Cut waste by executing the optimum actions required to build, test and deploy your applications

As-is

Development Lead's Pain points

Marco
- Works for Travel4All
- Leads team of 8 developers
- Responsible for booking

No visibility into the operation side of the organization, would like to close that gap

Would like to **detect problems early**, but most of the complexity and performance related issues are identified **after the fact** with the current process

User Scenario

1

New features developed by Marco's team has been **deployed to pre-production** for performance testing.

2

When tester, Trish, does large amount of booking using mobile devices**, the system is really slow.** Trish opens a defect.

3

Marco, as part of the process to **triage the defect**, wants to do **initial analysis** by gathering system behavior and any other related data that would **help development team to debug** the issue.

How does is currently happen?

Marco opens the defect and looks at the comments and data that Trish put in. Trish had comments about noticing system slow down, booking processing taking a longer and longer time with additional load.

Marco reaches out to the Operations team to get more information. Operation team send him a bunch of reports that have a snap shot of various performance characteristics.

Marco sifts through the reports, looks at the manuals on how to interpret the reports, gathers data based on this interpretation of the reports and puts that into the defect.

Marco would also like to understand the current version running in the production environment, but has to request the data again from operations team.

Marco would also like to get a high level view of the new transaction complexity, what changed from previous version – but has no easy way.

To-be

How does Marco do it with ADI?

See the problem immediately after login to ADI.

Single click shows more specific details.

No sifting or interpretation of reports, key information on offending transactions readily available.

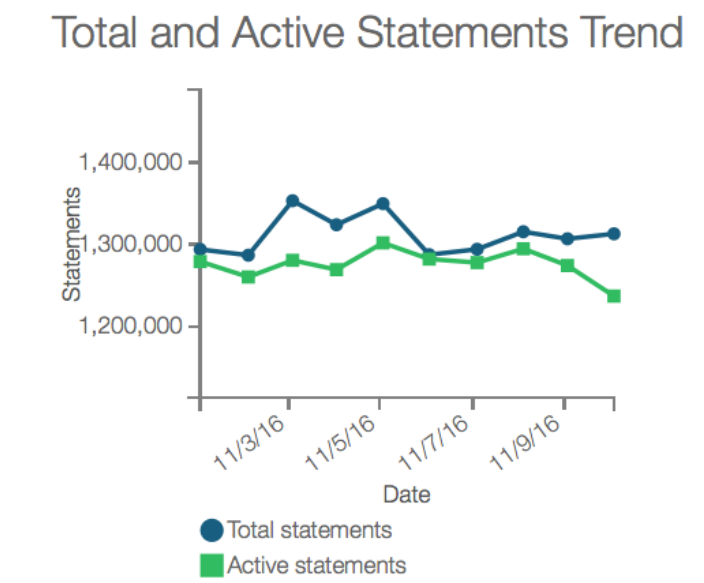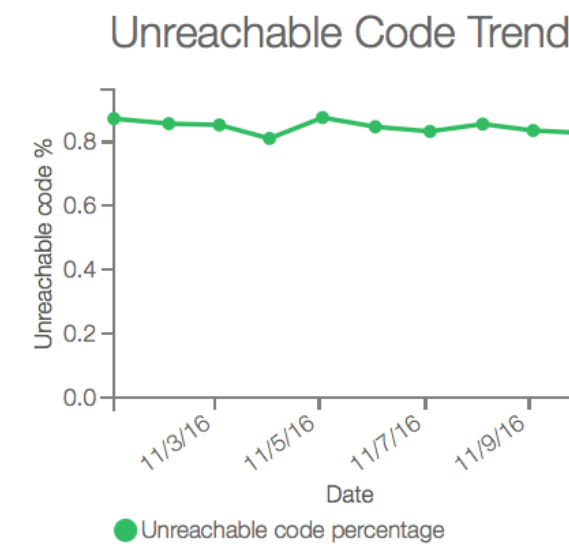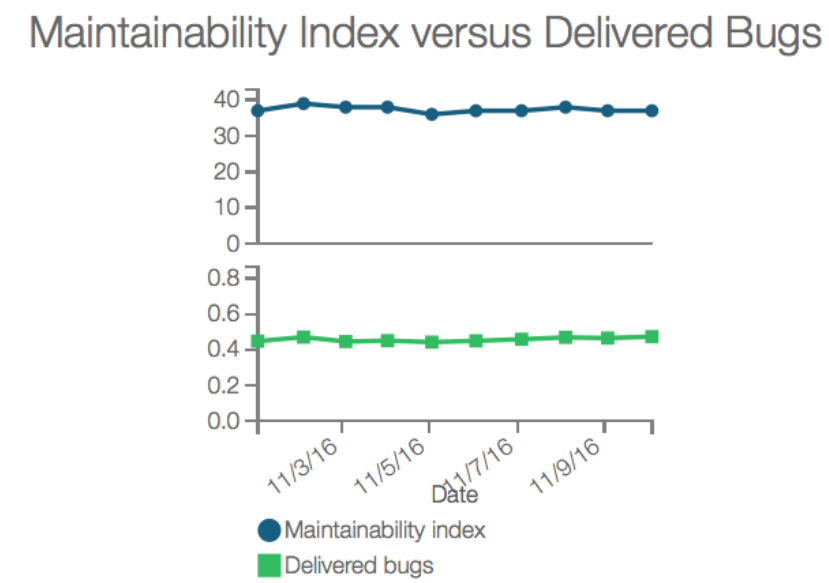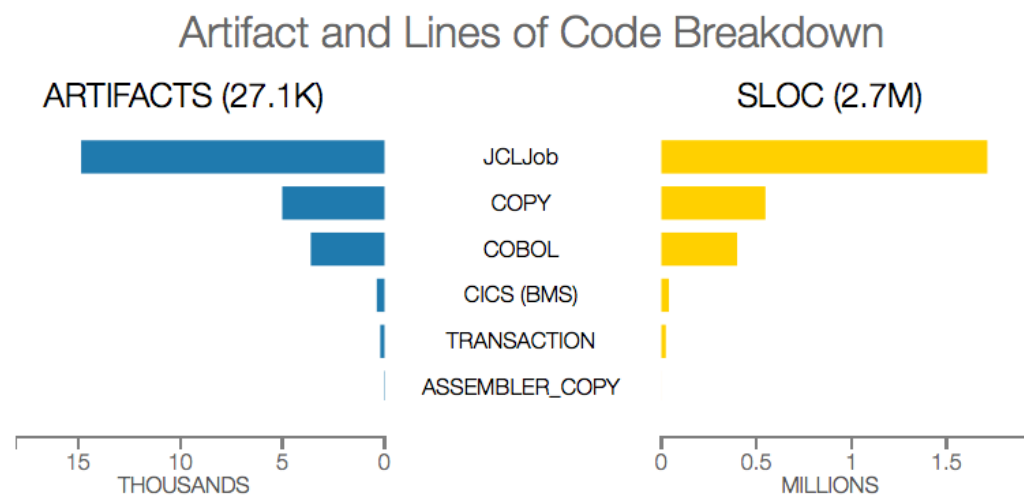ADI visually tells Marco that **the I/O rate** is really high.

Ops data showed Marco the behavior of transaction, Marco wants to know **what are the changes** to the transaction at artifacts level.

A Typical Use Case of ADI

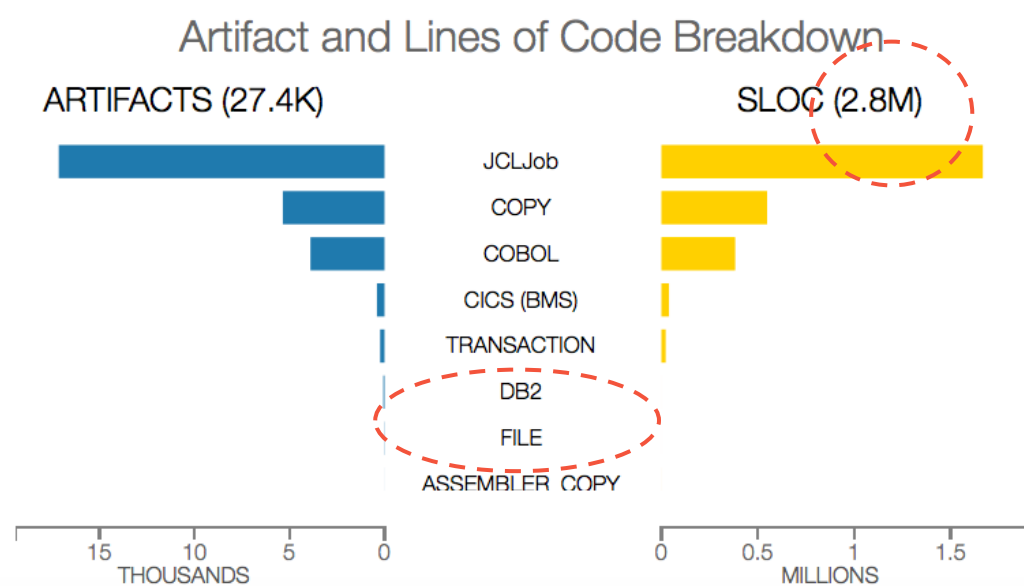## Source code increased, and maintainability got worse for the latest version.
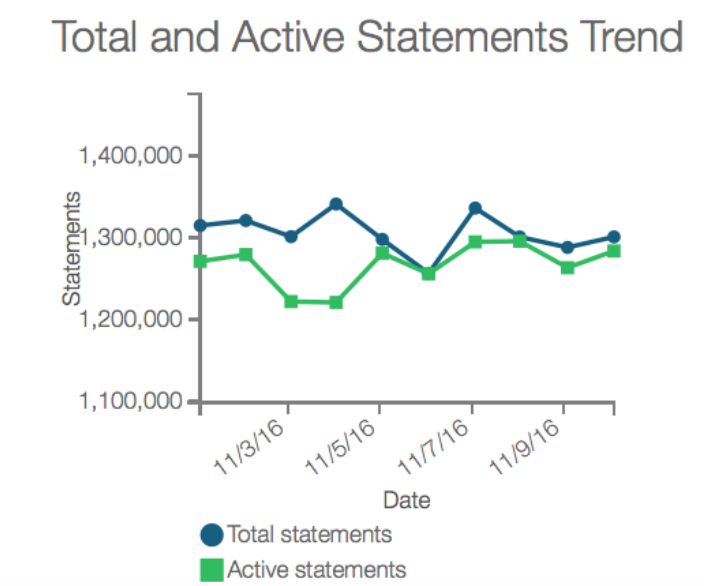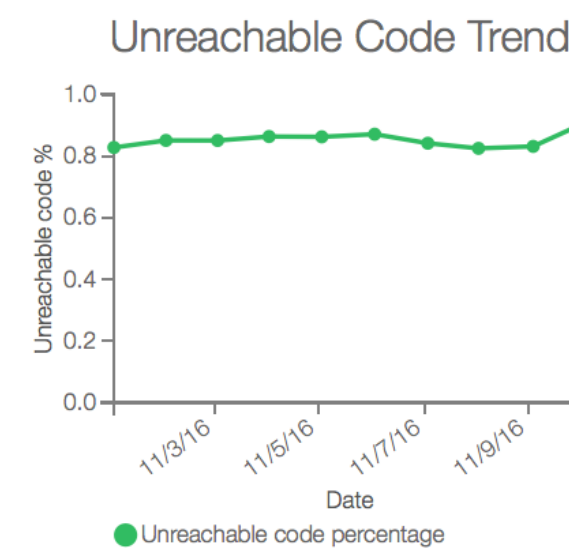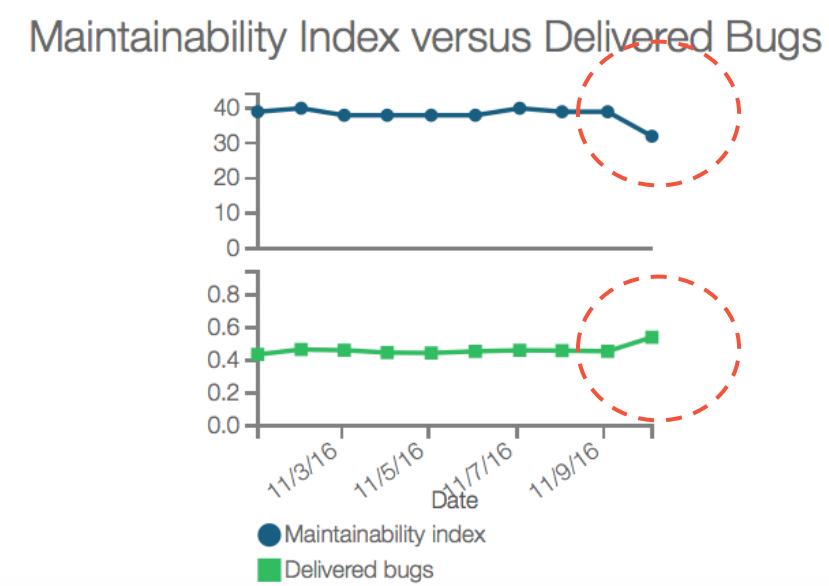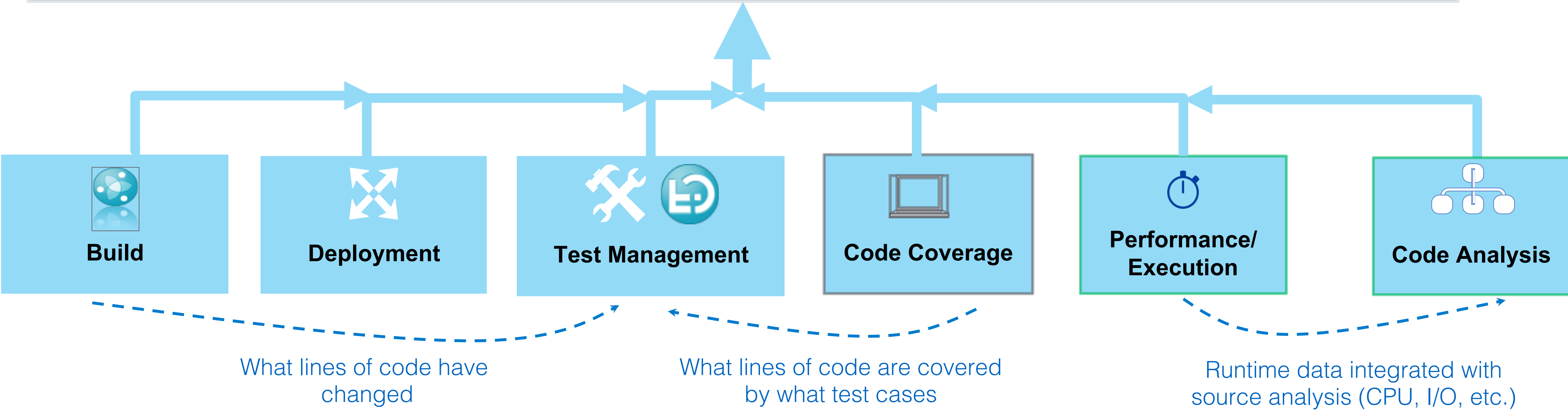
A Typical Use Case of ADI

What was the test and coverage for the build that got deployed in pre-prod environment?

New code added but was not tested! Coverage dropped for the last build!
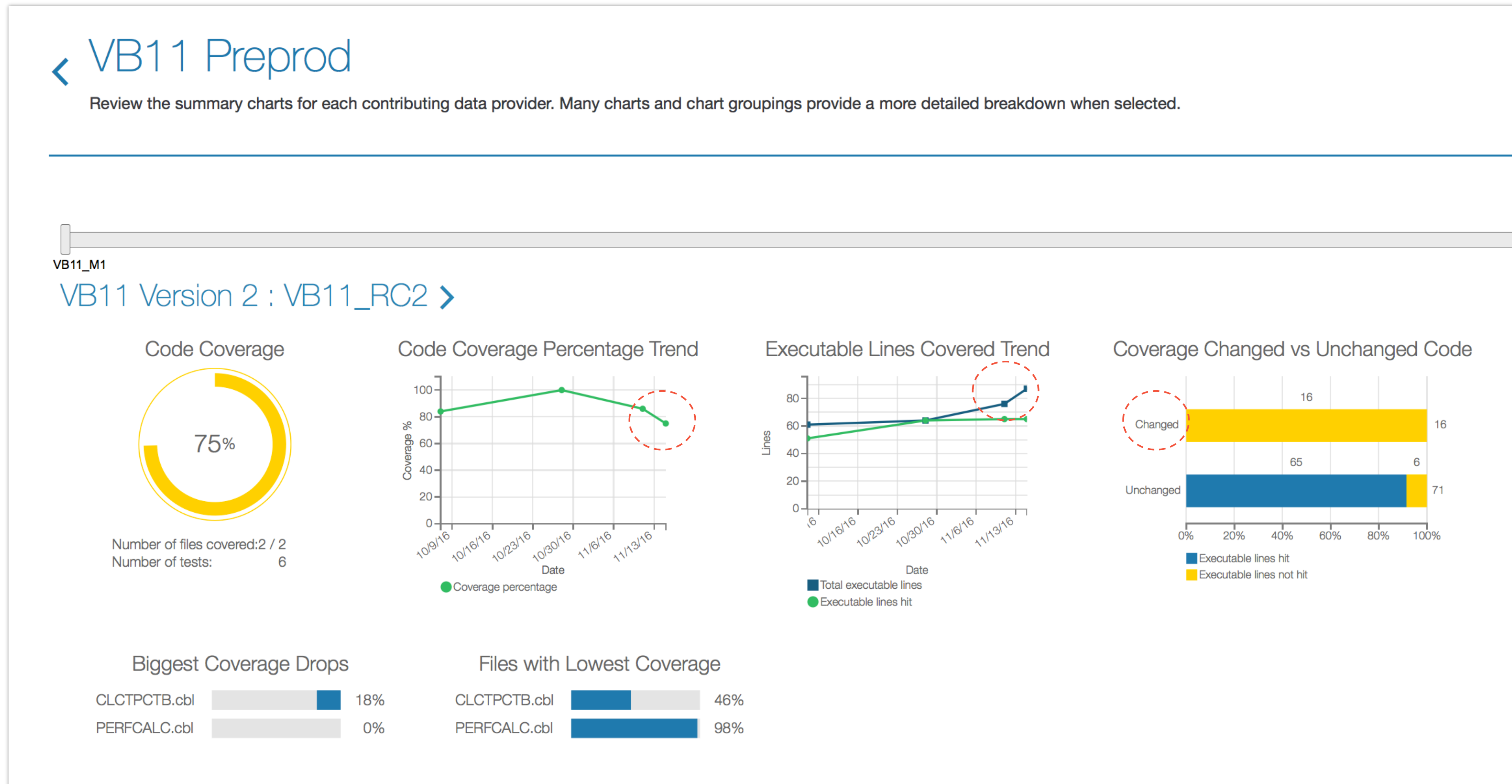
Application Discovery and Delivery Intelligence

Unlock	Empower	Appraise
Analysis	Insight	Optimization

Build

Deployment

Test Management

Code Coverage

Performance/ Execution

Code Analysis

What lines of code have changed

What lines of code are covered by what test cases

Runtime data integrated with source analysis (CPU, I/O, etc.)

- COBOL, PL/I, JAVA
- z/TPF Code Coverage integration

- ADI-OMEGAMON for CICS Integration
- z/TPF Name Value Pair Collection integration

- ADI-AD integration
- z/TPF Code Analysis with AD

What's available since 2016

What we are thinking about to support z/TPF

ADDI Benefits to z/TPF Clients

- ➢ Scriptable Code Coverage:
  - Allows for automatic collection of test results and pushes the results to ADI
  - ADI provides the trends, insights and actionable recommendations into the data

- ➢ z/TPF Name Value Pair Collection:
  - Enables new insights into system resource usage and identifies the source of problems in much less time previously required
  - ADI provides the trends, insights and actionable recommendations into the data

- ➢ z/TPF Code Analysis with AD:
  - First step of any application change or transformation is to understand the systems, data and programs involved
  - AD offers the deep understanding required for planning and executing application transformation and development
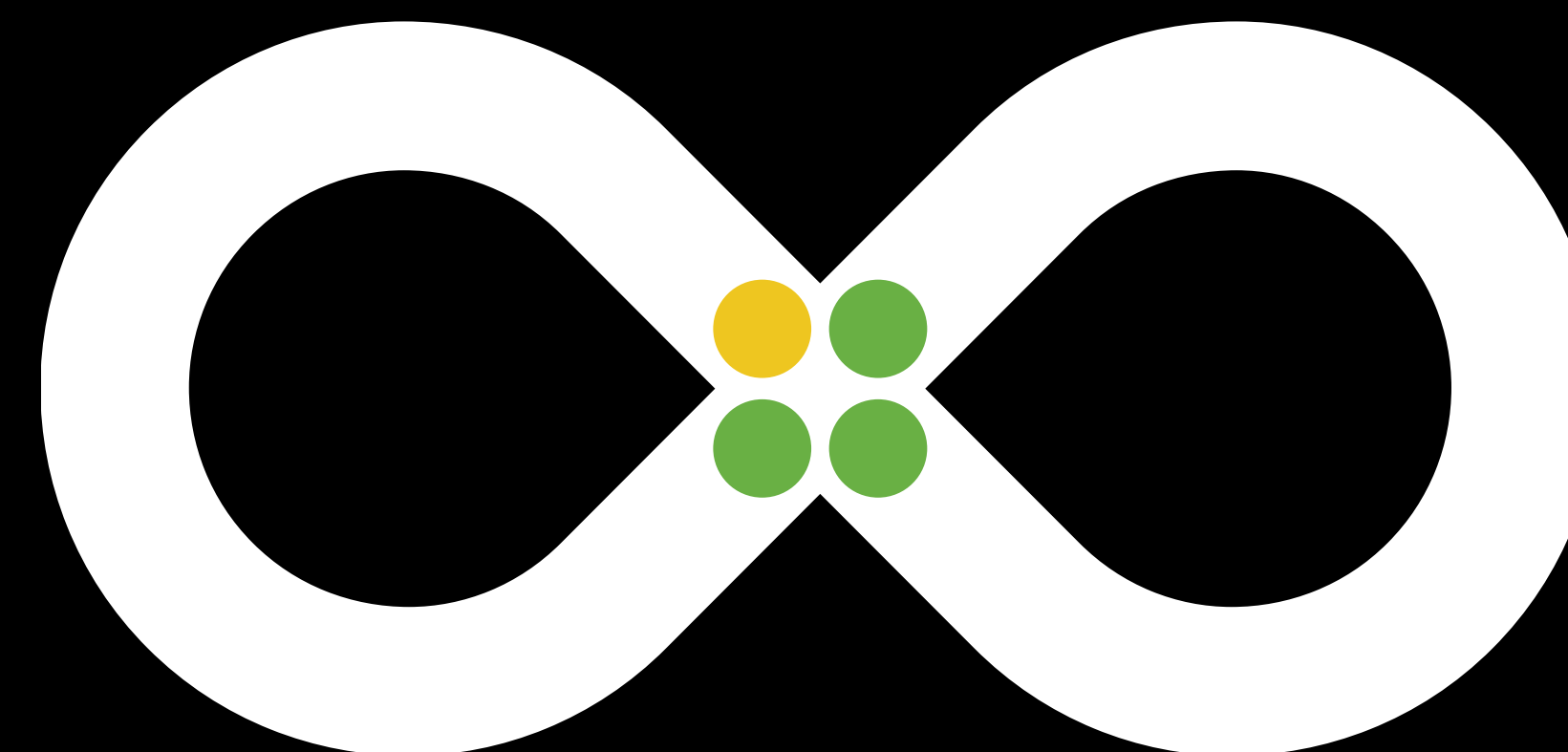
Let's make ADI more helpful for <u>you</u>

Users are the premise for every action we take at IBM

We measure success based on the value that we bring to you

IBM **Design Thinking**
Human-centered outcomes at speed and scale

We invite you to become a Sponsor User

Make with us.

A Sponsor User is an active participant who works alongside our teams to help us design experiences for real target users rather than imagined needs.
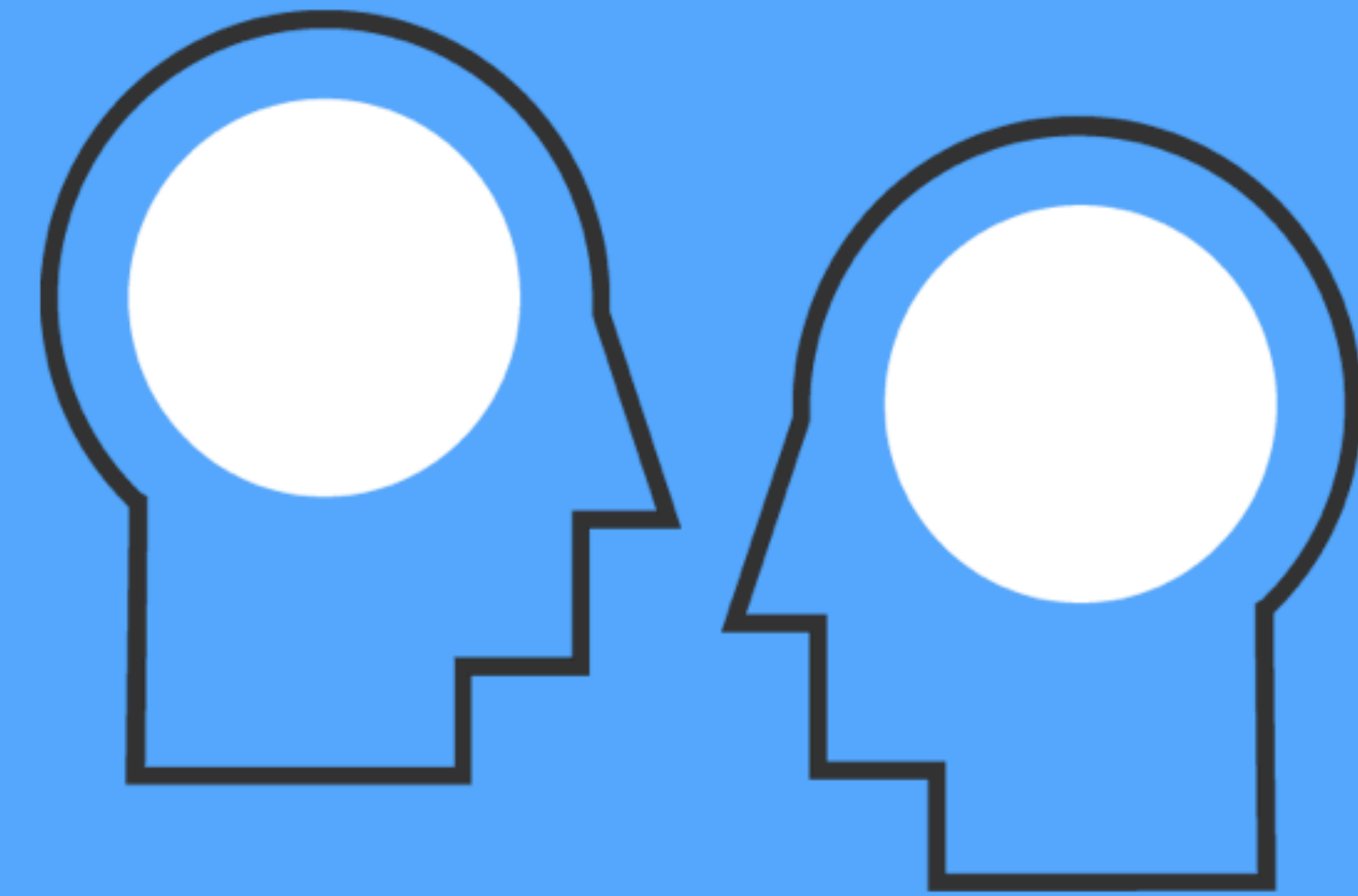
In person or through remote sessions.

What to expect

Sponsor user activities include surveys, interviews, on-site visits, and user testing that take up a few hours max per month.

These will help us identify your biggest system related problems and create solutions specifically for your needs.
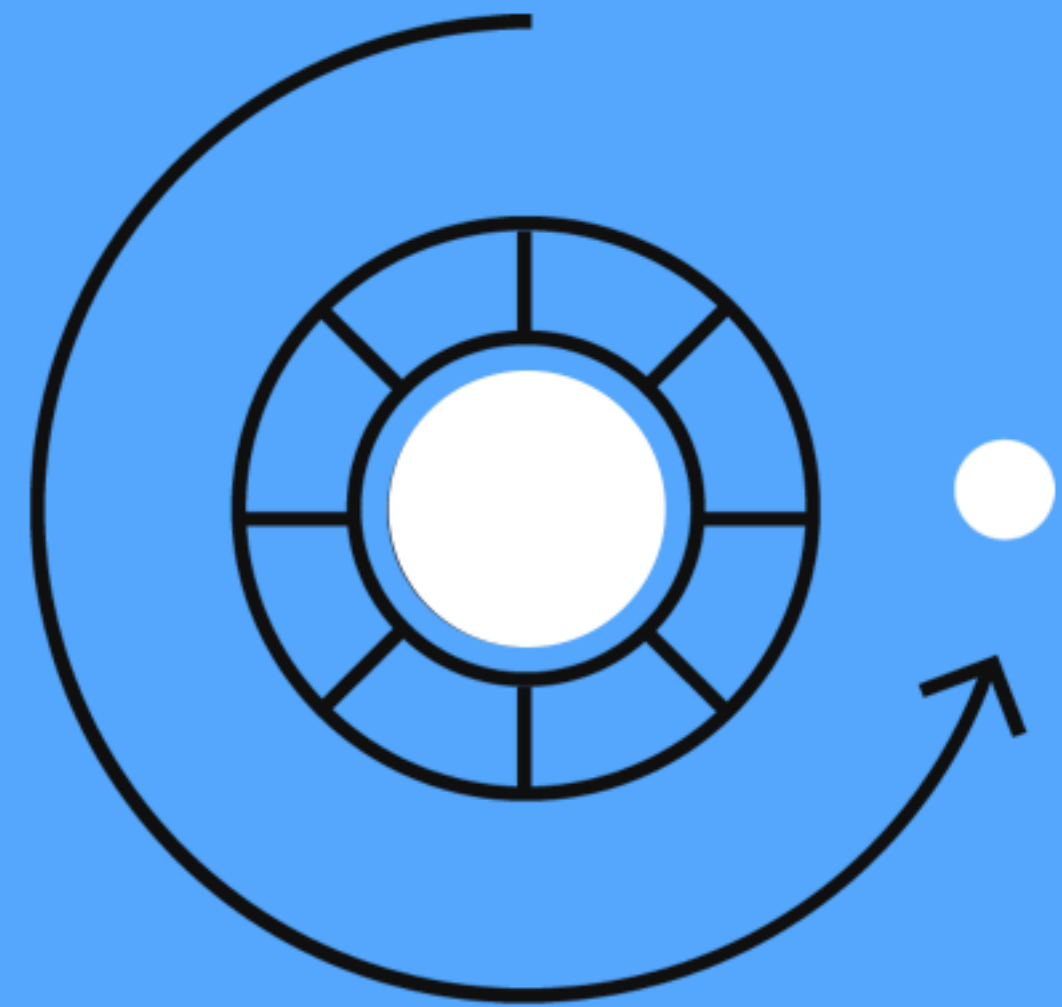
Email us if you are interested

User Experience Designers
- Dimitry Galamiyev   dimitryg@ca.ibm.com
- Steve Murphy   srmurphy@ca.ibm.com

Sessions Supporting ADDI

➢ Scriptable Code Coverage:
- Tuesday - April 4th, 2017
- 8:00am - 9:00am - Toolkit Task Force
- Automating Code Coverage Collection for Automated Testing

➢ z/TPF Name Value Pair Collection:
- Monday - April 3rd, 2017
- 3:45pm - 4:45pm - Subcommittee Meeting - Operations and Coverage
- NVPC Update - Name Value Pair Collection Support

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Notes

Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming ming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

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THANK YOU

Questions or comments?

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