

How IBM Digital Experience Continuous Delivery Makes Your Life Easier

Johannes Lebek, Digital Experience Core L3 Lead



#IBMDX15

Please Note

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.

The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming 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 results similar to those stated here.



Agenda

- Definition of Continuous Delivery
- Definition of Cumulative Fixes
- Benefits
- Requirements
- Summary

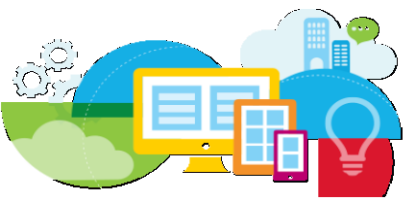




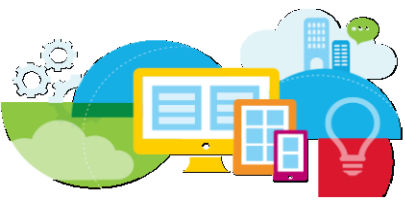
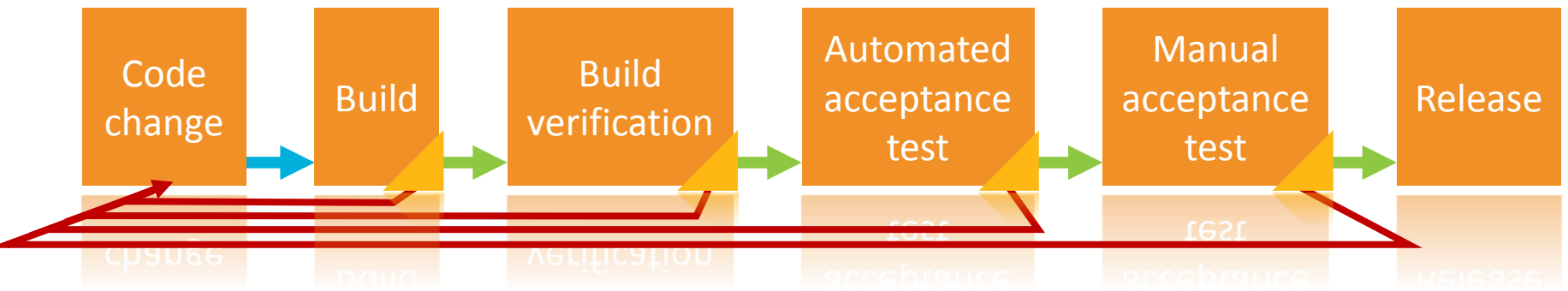
What is
Continuous
Delivery?

Continuous Delivery: Definition







- Approach of Software Engineering
 - Short development cycles
 - Continuous Integration
 - Highly automated tests, carried out continuously
 - Releasable product at any time



Continuous Delivery: Implementation



Continuous Delivery: Benefits

-  Accelerated Time to Market
-  Building the Right Product
-  Improved Productivity and Efficiency
-  Reliable Releases
-  Improved Product Quality
-  Improved Customer Satisfaction





How was it
done before?*

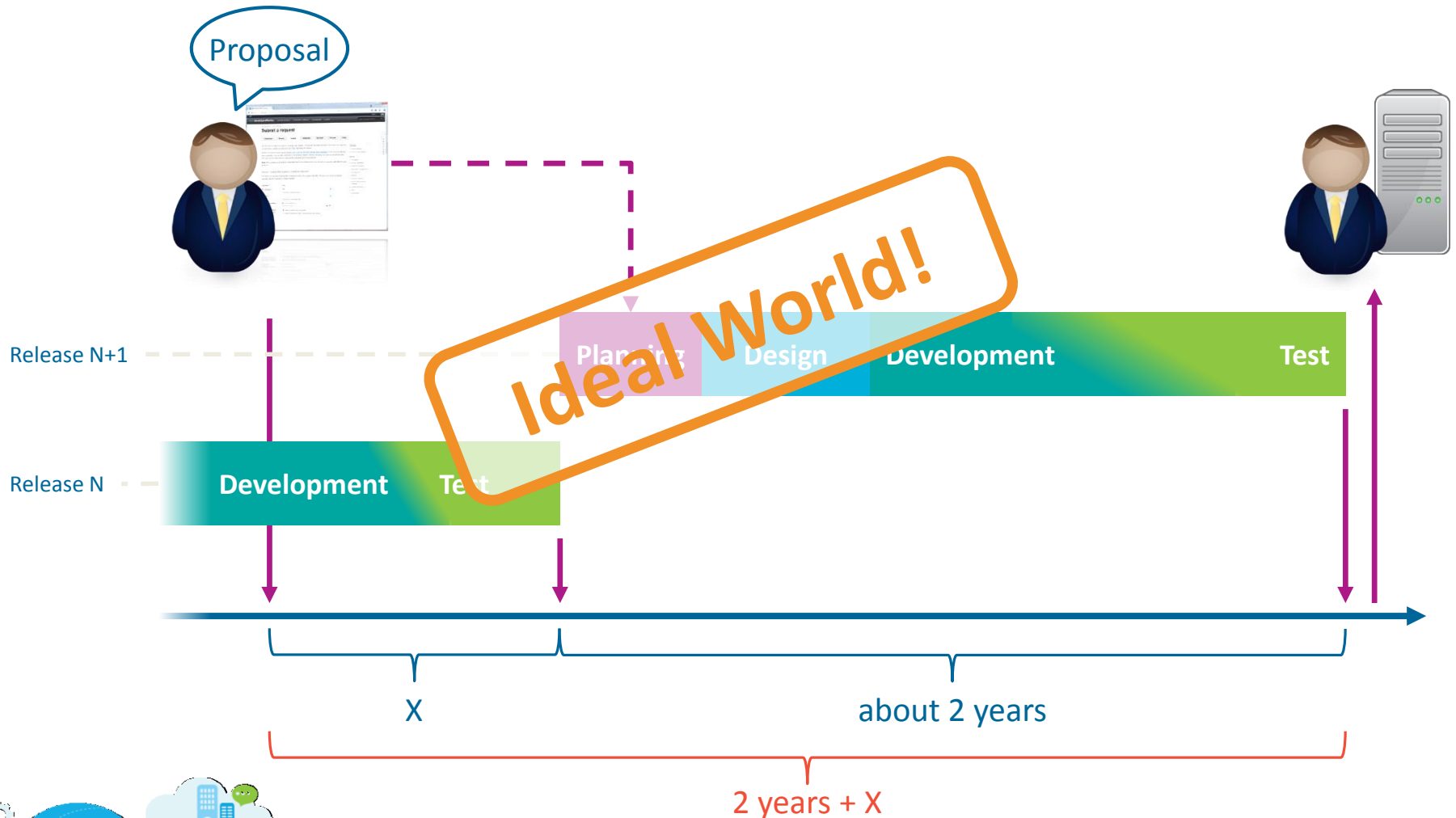
* by Portal

History of Feature Delivery

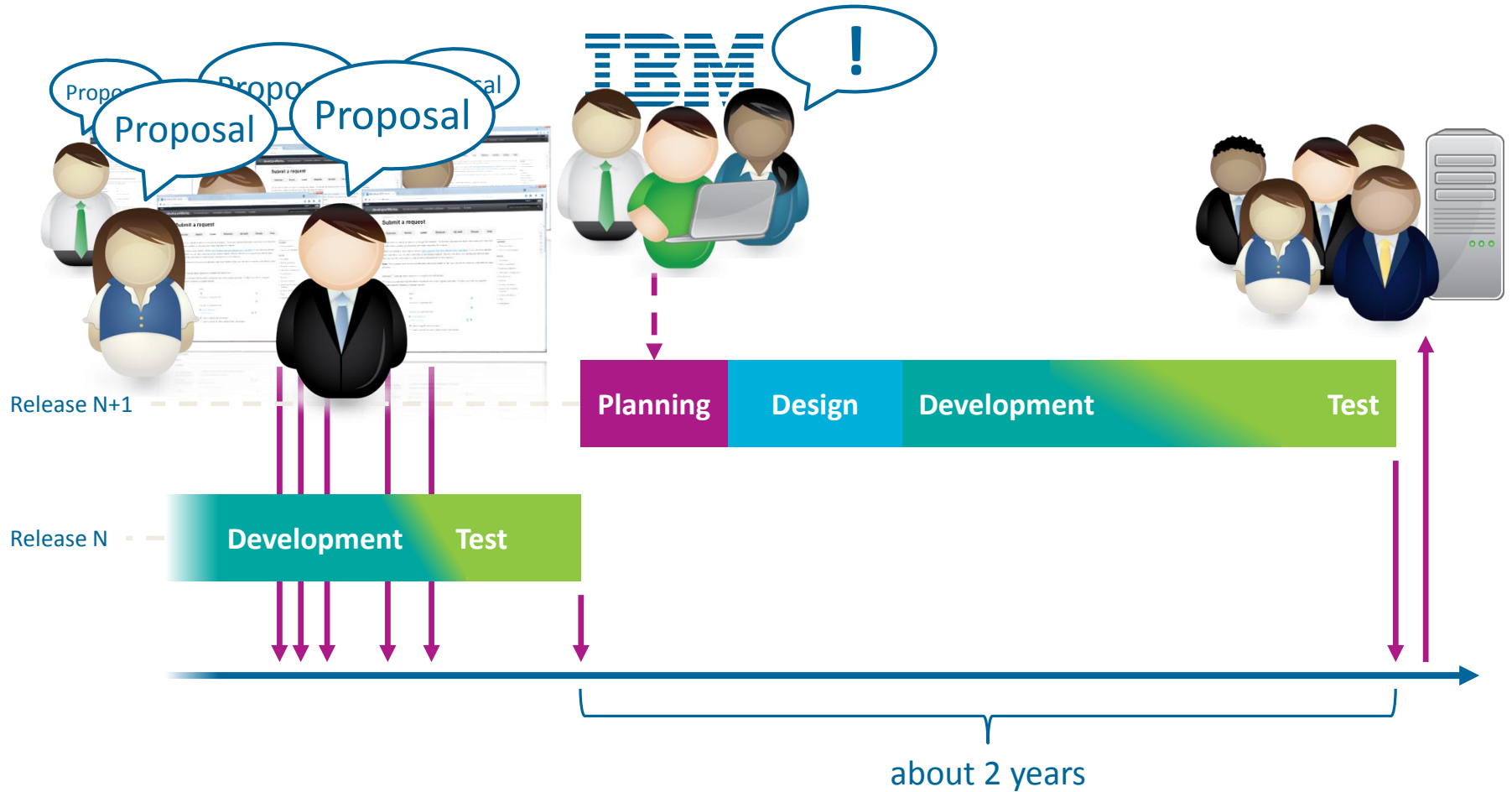
- Customers and Product Management propose new features
- Features are planned for next Portal release
 - Planning phase is at the beginning of a release
- Features can be provided with the next release only
 - Some features are provided as catalog shipments with limited support
- Average release cadence was 2 years



History of Feature Delivery



History of Feature Delivery



History of Feature Delivery

- New releases require new installation
 - No in-place upgrade
 - Migration of existing environment
- New release may change default behavior, deprecate or even remove existing functionality

 Need to speed up feature delivery and reduce effort of feature exploitation



Shipment Vehicles

- Release
 - Term of pre-CD times
 - No plans to publish another Portal release
- Fix pack
 - Fixes
 - Currency updates
 - Features
 - Cadence of multiple months



Shipment Vehicles – *continued*

- Cumulative fix
 - Maintenance package
 - Collection of individual fixes for the entire product including corresponding configuration steps
 - Contains all fixes of previous cumulative fix
 - Can be applied directly, no dependencies
 - Cadence of 10 to 12 weeks



Shipment Vehicles – *continued*

- Cumulative fix - *continued*
 - High test coverage, automated and manual, when compared to individual fixes
 - Uses IBM Installation Manager framework to simplify installation process
 - Notifies you about available maintenance packages
 - Nevertheless, play safe
 - Fresh backup
 - Maybe prepare a stand-by system
 - Run regression tests of your custom application



Shipment Vehicles – *continued*

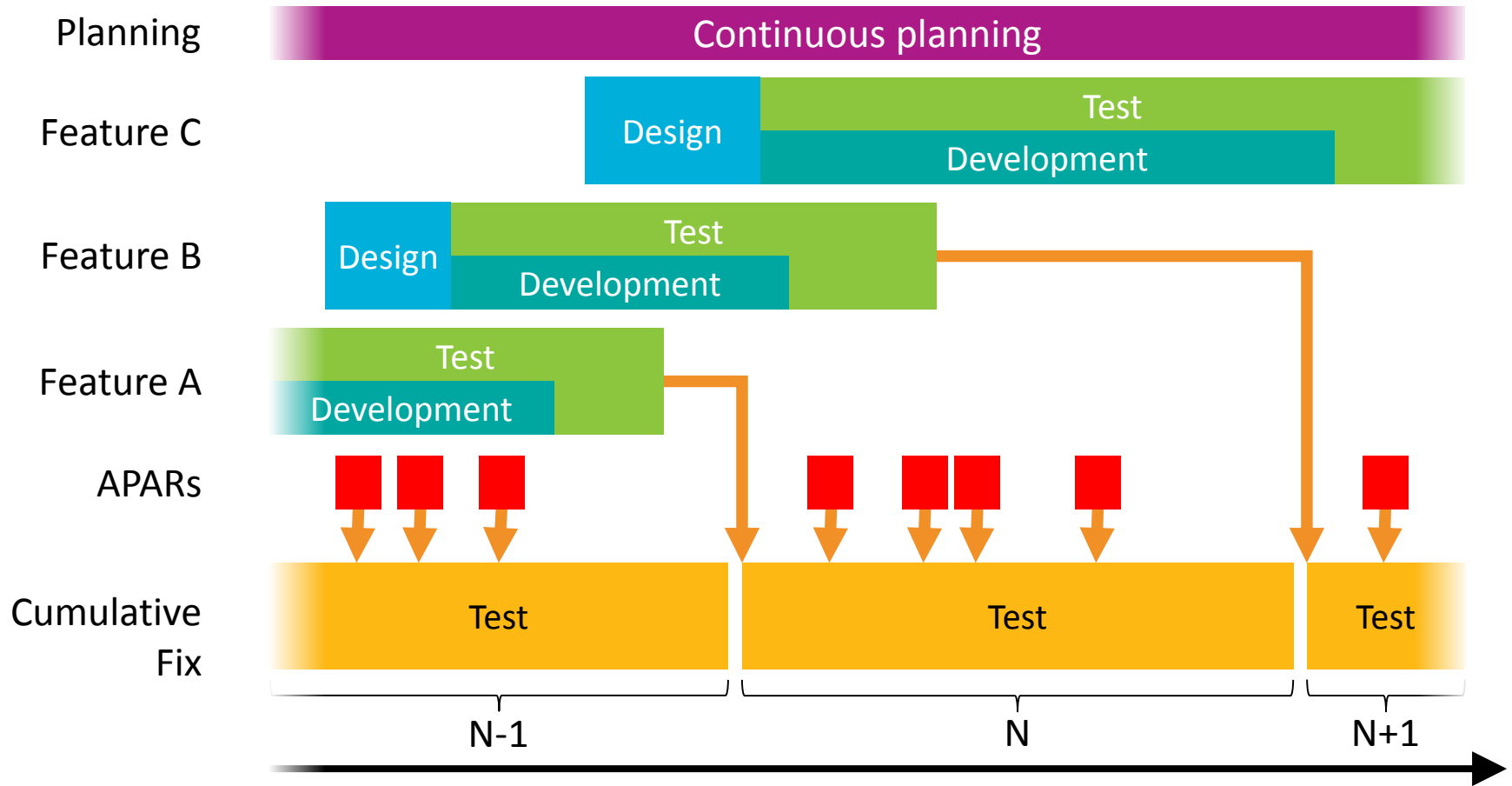
- Interim Fix
 - Exception to the maintenance process, fix a security vulnerability as soon as possible
 - Regression tests, functional test of particular issue and areas that are expected to be affected by this change
 - About 2 weeks to deliver, installable via IIM, may need configuration step
- Test patch
 - Verification of fix before corresponding CF is released
 - Provided immediately after fix is implemented
 - Loose class files usually
 - Direct communication via PMR → subsequent changes to fix on our end are communicated to recipient of test patch





How does Portal
implement
Continuous Delivery?

Cumulative Fix Release Cycle



Ensuring Highest Quality

- Feature development done in streams separated from CF stream
- FVT & SVT conduct tests immediately
- Merge into CF stream only if all tests passed successfully
- Merges at beginning of CF release cycle only
→ 10 to 12 weeks of additional tests in CF stream



Ensuring Highest Quality – *continued*

Automated tests for **each** build:

Automated
user acceptance tests

Integration tests

Migration tests
(to version 8.5)

Continuously running
automated regression tests

Installation &
rollback tests



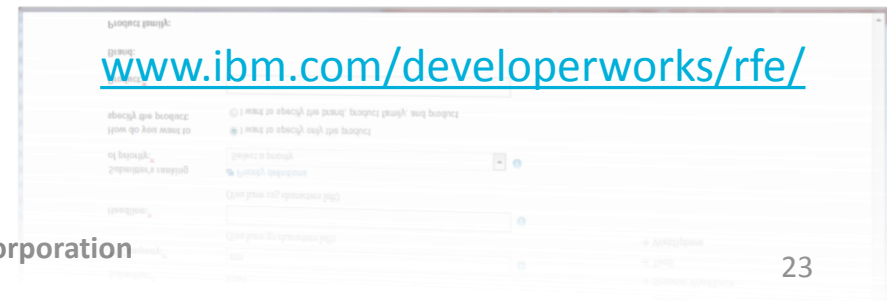
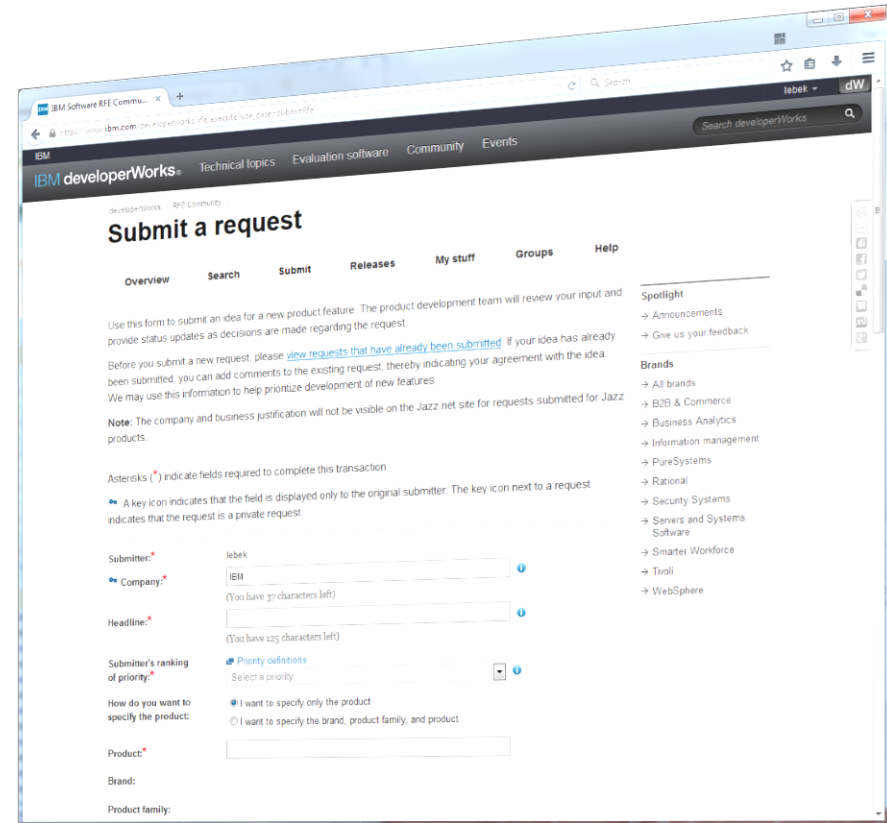
Ensuring Highest Quality – *continued*

- Continuous regression tests of performance and long-runs
 - Regression test of complex enterprise scale environments
 - Migration, installation / rollback
 - Continuous refinement and improvement of test cases based on PMR review and support feedback
 - Test teams focus on CF tests only, no release development in parallel
- ➔ Release-grade tests for each and every CF**



Continuous Delivery: Features on Demand

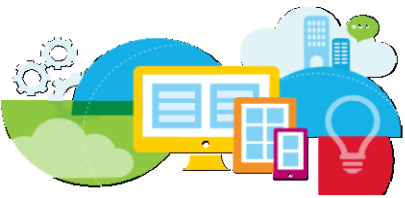
- ✓ Agile response to needs
- ✓ Introduction of product features outside of release cycle
- ✓ Full support



Overview of Delivered Features

- **CF03**
 - Theme analyzer for portlet modules
 - Resource aggregation for portlets
 - Public ResourceCombinerService API
 - Syndication extension points
 - Worklight 6.2 integration
 - SmartCloud for Social Business Search (SAML)
 - Invalid friendly URLs
 - SmartCloud for Social Business HTTP Outbound
 - @mentions
 - SmartCloud for Social Business Connections integration
 - Web Application Bridge Mobile support
 - Windows Mobile support
 - Web Content Manager REST API
 - Inplace editing for Web content
- **CF04**
 - Validation improvement for the Configuration Wizard
 - Renditions
- **CF05**
 - UX Screen Flow Manager
 - Project publish and validation updates
 - Folder updates
- Syndication modes
- SmartCloud for Social Business integration by using Active Directory Federation Services (ADFS)
- Searching in a multilingual environment
- Content as a Service pages
- Improved WSRP consumer markup caching
- **CF06**
 - Configuration wizard supports transfer to multiple Oracle databases
 - Improved page loading performance by asynchronous web content rendering
 - Integrating remote JSON data by using the Digital Data Connector
 - Web Application Bridge support for SAML
 - WSRP remote session invalidation
 - WCM REST service supports creating and updating authoring templates
 - Updates to image and file elements in WCM
 - Custom search boxes can display results in Search Center
 - Deprecation of OneUI
 - Document Services feeds for Federated Documents

Visit “[Knowledge Center > IBM WebSphere Portal and IBM Web Content Manager V8.5 > Overview > What's new > What's new in the combined cumulative fixes](#)” for a comprehensive list



In Addition: Features delivered on the Collaboration Solutions Catalog

- Script Portlet
- Connections portlets
- CTC – Content Template Catalog
- Commerce portlets
 - WebSphere Commerce Sample for IBM Digital Data Connector in WebSphere Portal
- Digital Experience File Sync
- Cache Viewer portlet
- IBM Social Rendering Templates for Digital Data Connector
- Integration for Enterprise Marketing Management V2.0

https://greenhouse.lotus.com/catalog/home_full.xsp?fProduct=WebSphere0Portal



Feature Enablement

- Features muted by default, non-disruptive
- Individual configuration tasks enable features
 - E.g. for feature “Content as a Service pages” run
`ConfineEngine.sh install-caas`
- No migration needed
- Starting point in documentation: Roadmap
https://www.ibm.com/support/knowledgecenter/SSHRKX_8.5.0/mp/install/rm_cf.dita



Projectable Maintenance

- CFs are released every 10 to 12 weeks
 - Release Portal 8.5
 - CF01 → July 2014
 - CF02 → September 2014
 - CF03 → October 2014
 - CF04 → December 2014
 - CF05 → March 2015
 - CF06 → May 2015





What is my
personal benefit?

I am a DEVELOPER.

What is the benefit for me?

- Before Continuous Delivery
 - Feature request → next release in about 2 years
 - Shortcut via catalog delivery in rare cases
 - New application requires migrated production system
- With Continuous Delivery
 - Feature request → 4 to 5 CF releases per year
 - New application only requires enablement of corresponding feature, no migration



I am an ADMINISTRATOR.

What is the benefit for me?

- Before Continuous Delivery
 - CFs helped with pro-active maintenance
 - Need for new feature requires installation of full release → Migration of existing environments
- With Continuous Delivery
 - Same help with pro-active maintenance
 - Further improved CF quality
 - Features muted until activated
 - Feature needed? Run a configuration task, not a full migration
 - CD allows for running a cloud service with Portal



I am a **BUSINESS USER**.

What is the benefit for me?

- Shorter time to leverage new functionality
- Developers can deliver requested functionality quicker, if that would rely on Portal functionality that is not present yet



Requirements

- If not exercised already:
Plan for applying cumulative fixes on production environments on a regular basis
 - At least twice a year (= every other CF)
 - Because:
Fixes are provided on the latest CF level



Summary

- Continuous Delivery allows you to
 - Receive features requested by you in a reasonable time
 - Take advantage of the newest features with minimal effort in an existing production environment
 - Stay up to date in terms of
 - Security
 - Performance
 - Stability
 - Capability



Summary – *continued*

- **Continuous Delivery** not only **accelerates access to new features** significantly, but at the same time also **improves Cumulative Fix quality**
- **Portal cumulative fixes are your friend!**





Thank you!



Johannes Lebek

*IBM Portal
Core L3 Team Lead
Middleware, IBM Systems*

*IBM Deutschland Research &
Development GmbH
Schoenaicher Str. 220
D-71032 Boeblingen*

*Phone +49-7034-2741769
lebek@de.ibm.com*

For Additional Information

- **IBM Digital Experience Solutions**
<http://www-01.ibm.com/software/collaboration/digitalexperience>
- **WebSphere Portal and IBM Web Content Manager Information Center Wiki**
<http://www-10.lotus.com/ldd/portalwiki.nsf/>
- **IBM Digital Experience Demonstrations:**
<http://www.youtube.com/user/IBMXWebX>
- **IBM Digital Experience Developer**
<http://developer.ibm.com/digexp>
- **IBM Software Business Solutions Catalog**
<https://greenhouse.lotus.com/catalog/>

