Testing Team Best Practices
Fall Crush 2004 Edition

Contents:
I Introduction- explanation of document
II Topical Outline- outline in topical format
III Calendar Outline- outline in calendar format

I Introduction

This document will outline best practices for the Fall Crush Testing Team. It will attempt to encompass the entire, year-round Fall Crush process and will be amended when determined necessary by Team members. It is presented in both a Calendar and Topical Outline. Each outline is cross-referenced by topic and month; i.e., items in the Calendar Outline are followed by their respective topics and items in the Topical Outline are followed by the month in which they occur. Rather than a set of specific procedures, this document is meant as a guide to be used throughout Fall Crush to ensure the Testing Team is keeping on-track with its stated puPRoses.

List of Topical Abbreviations (as used in Calendar Outline):

BCP- Beta CD Production
BT- Bug Tracking
EE- External Event
PR- Process Review
SD- Script Development
TC- Testing Community
TP- Testing Process
TTM- Testing Team Management
II  Topical Outline

Testing Team Management

- Testing Team Kick-off (Feb)
- Establish preliminary timeline for testing procedure (Feb)
  - The timeline should consist of schedules for Beta CD production (Burn Schedule), actual Summer and Fall testing schedule, and Standards Lab reservation schedule.
- Assign tasks to team members (Feb)
  - Testing Manager – This individual is responsible for the various areas of the Testing Process, including the following:
    - Data flow – assign bug entries from the testers themselves back to the Developers or other groups or individuals (i.e., Script Editor, Bug Tracking Admin, etc.)
    - Business rules – develop standard format for bug entries, establish procedures for testers to follow during testing, coordinate used script archiving
    - Manage testers - recruit, coordinate, and schedule testers; set up and manage tester training, field tester questions/concerns
    - Testing schedule – establish schedule for Summer and Fall testing, reserve Standards Lab, develop Testing matrix to ensure all relevant variables are tested (i.e., OS, clean/dirty machines, network connectivity, etc.)
    - Team Liaison – maintain contact with the other teams involved in the Fall Crush process to ensure that testing is relevant and accurate; usually accomplished through Core Team. Contact with other teams is usually informal and general in nature, though formal inter-team meetings may be scheduled to address specific concerns.
  - Bug tracking software admin – This individual is responsible for the administration of the bug tracking software package used throughout the testing process. Responsibilities include:
    - Software selection – lead team efforts to evaluate previous year’s software and determine retention or replacement; evaluate potential replacement candidates; select replacement
- Software management - install and configure software package (if new), install requisite updates/patches, manage requisite customizable items (field titles, field entries, etc.), and manage user accounts
- Data management - archive previous year’s reports, ensure separation of current year’s data from previous year’s data to avoid confusion, migrate items flagged as “Suggestions for next year” to current database for reference

  o **Script editor** – This individual is responsible for the scripts used for specific testing scenarios. Responsibilities include:
    - New script development – create new scripts needed for current year’s testing using the Testing matrix
    - Script editing – edit current scripts as necessary for relevant and accurate testing
    - Script distribution - ensure timely delivery of new/edited scripts to Testing Manager for scheduled testing
    - Archive scripts – maintain archival copies of scripts from previous years for reference

  o **Beta CD Production Manager** – This individual is responsible for production of the Beta CDs used for testing. Responsibilities include:
    - Burn schedule – establish schedule for Beta CD burns for Summer and Fall testing and maintaining the entire Beta CD production process; the schedule will dictate the Folder Structure detailed below
    - Folder structure – create the folder structure used in CD burning; folder structure is the repository for successive generations of the Beta CD, including “Installer Only” and “Full” versions (i.e., developers put their most recent iteration of a beta CD in the appropriate folder and said folder contents are used by the CD Production Manager to produce the Beta CDs for testing); structure is dictated by the Burn Schedule (see above); NOTE: should a corresponding folder be empty on a scheduled burn date, the contents of the next most recent folder are used to produce a beta CD
- Beta CD creation/distribution – ensure timely burn of Beta CDs and delivery to Testing Manager for scheduled testing

- Initiate and maintain contact/dialog with various other teams throughout Fall Crush process (Core, Design, Installer, Documentation) (Feb - Jul)
  - Contact with other teams (handled generally through Core Team) is usually informal and general in nature, though formal inter-team meetings may be scheduled to address specific concerns.
  - Core Team
    - Coordinate schedules with other teams
  - Installer Team- CD content
    - Review content with Installer team
    - Request input on testing parameters from Installer Team
  - Design Team- CD flow
    - Review CD flow with Design Team
    - Request input on testing parameters from Design Team
  - Documentation Team
    - Review current CD documentation
    - Determine any new content
    - Request input on testing parameters from Documentation Team

- Summer CD to press (Jun)
- Fall CD to press (Aug)

**Process Review**

- Process Update (Jan)
  - Review Crush process – evaluate the entire Crush process, noting successes and shortcomings
  - Lessons Learned – develop criteria for changes in next year’s Crush
  - Review Best Practices – evaluate Best Practices Documentation and determine necessary changes or alterations
  - Implement changes/improvements from last year

- Fall wrap-up (Oct)
  - Review Crush process – evaluate the entire Crush process, noting successes and shortcomings
  - Lessons Learned – develop criteria for changes in next year’s Crush
Review Best Practices – evaluate Best Practices Documentation and determine necessary changes or alterations
Determine changes/improvements for next year

**Bug Tracking**

- Bug tracking software *(Feb)*
  - Software selection – lead team effort to evaluate previous year’s software and determine retention or replacement; evaluate potential replacement candidates; select replacement
  - Software management - install and configure software package (if new), installing requisite updates/patches, and manage user accounts
  - Data management - archive previous year’s reports, ensure separation of current year’s data from previous year’s data to avoid confusion, migrate items flagged as “Suggestions for next year” to current database for reference
- Business rules – develop standard format for bug entries, establish procedures for testers to follow during testing, coordinate used script archiving *(Feb- also TP)*
- Data flow - assign bug entries from the testers themselves back to the Developers or other groups or individuals (i.e., Script Editor, Bug Tracking Admin, etc.) *(Feb- also TP)*

**Script Development**

- Begin Script Development *(Mar)*
  - Review previous year’s scripts – use archived copies to evaluate previous script effectiveness
  - Identify scripts needed – use testing matrix in script creation to ensure all relevant variables are tested (i.e., OS, clean/dirty machines, network connectivity, etc.)
  - Establish new parameters and changes
  - Incorporate changes into new scripts
- Ensure timely production of scripts and delivery to Testing Manager for scheduled testing
- Edit/adjust scripts as necessary for Installer CD testing *(Apr)*
- Edit/adjust scripts as necessary for Summer CD testing *(May)*
- Edit/adjust scripts as necessary for Fall CD testing *(Jun)*
Testing Community

- Identify tester candidate pool (Mar)
  - Internal TSS Pool – testers internal to TSS, used primarily for initial Installer and early Beta CD testing in controlled environment (Standards Lab), usually early in the Summer and Fall testing processes; focus on technical details including proper function of Installers, Application testing, proper function of Interface
  - External Pool – testers from outside TSS, used for general CD Testing in uncontrolled and unscripted (real-world) environment, usually later in the Summer and Fall testing processes; focus on over-all CD behaviour for end-user POV including ease of CD use, intuitive CD design, proper function of Applications after installation (NOTE- External testing still evaluates technical behaviour of the CD, but focus should be on how an end-user would experience the product.)
- Recruit candidates (Mar)
  - Internal TSS Pool
    - Recruited by email to TSS Department Heads requesting individuals available for testing; further contact to be directly with the individuals proposed by the Dept. Heads
    - Time commitment expectations should be clearly stated (number of testing sessions anticipated, session duration of 1 ½ to 2 hours each, etc.)
  - External Pool
    - Hand-picked by Testing Team from LSP community and other groups or individuals deemed appropriate by the Testing Team
    - Recruitment by email to specific individuals determined by above criteria
    - Time commitment expectations should be clearly stated (number of testing sessions anticipated, session duration of 1 ½ to 2 hours each, etc.)
- Develop training materials for testers (Mar)
  - Overview presentation on use of bug tracking software
  - Printed Business Rules for bug submission format
  - Standards Lab orientation (location of Lab, use of status markers, etc.)
- Train testers (Mar)
Schedule tester training
Inform Testing Pool of training time and location
Distribute printed materials, Standards Lab orientation, identify who testers go to with questions during testing

- Reward testers for Summer testing *(Jun)*
  - Pizza usually provided during end of testing process
- Reward testers for fall testing *(Jul)*
  - Pizza usually provided during end of testing process

**Beta CD Production**
- Establish CD burn schedule (summer and fall) *(Mar)* – schedule of Beta CD burning, dictates folder structure detailed below; Beta CDs to be produced as scheduled directly from contents of appropriate Burn Folders
- Establish CD burn folder structure *(Mar)* - folder structure is the repository for successive generations of the Beta CD, including “Installer Only” and “Full” versions (i.e., developers put their most recent iteration of a beta CD in the appropriate folder and said folder contents are used by the CD Production Manager to produce the Beta CDs for testing); structure is dictated by the Burn Schedule (see above); NOTE: should a corresponding folder be empty on a scheduled burn date, the contents of the next most recent folder are used to produce a beta CD folder structure used by Installer Team as repository for successive generations of Installers; entire folder structure should be determined in March and followed throughout the CD Production process
- Installer CD Burn begins *(Apr)* - creation of “Installer Only” Beta CD to be tested by Internal Testers
- Summer CD burn begins *(May)* - creation of “Full” Summer Beta CD, including Interface and Installers, primarily tested by Internal Testers
- Fall CD burn begins *(Jul)* - creation of “Full” Fall Beta CD, including Interface and Installers, primarily tested by both Internal and External Testers

**Testing Process**
- Business rules – develop standard format for bug entries, establish procedures for testers to follow during testing, coordinate used script archiving *(Feb- also BT)*
• Data flow - assign bug entries from the testers themselves back to the Developers or other groups or individuals (i.e., Script Editor, Bug Tracking Admin, etc.) (Feb-also BT)
• Develop testing schedule (Mar)
  o Schedule Summer/Fall testing back-to-back
• Reserve Standards Lab (Mar)
• Installer CD Testing begins (Apr)
  o Testing of Installers only, without CD Interface to ensure proper base Installer functionality; will cover individual application installers as well as integrated “Master” Installer when available
• Summer CD Testing Begins (May)
  o Testing of entire CD, including both CD Interface and Application Installers, as well as Application testing for functionality
• Fall CD testing begins (Jun)
  o Testing of entire CD, including both CD Interface and Application Installers, as well as Application testing for functionality

External Events
• Core Team Kick-off meeting (Jan) – coordinates entire Crush process
• Design Team Kick-off (Feb) – develops CD design
• Installer Team Kick-off (Feb) – develops Application installers for both platforms
• Documentation Team Kick-off (Mar) – evaluates all documentation related to CD, including web and printed materials
III Calendar Outline

January
- Process Update (PR)
  - Review Crush process
  - Lessons Learned
  - Review Best Practices
    - Implement changes/improvements from last year
- Core Team Kick-off meeting (EE)

February
- Design Team Kick-off (EE)
- Installer Team Kick-off (EE)
- Testing Team Kick-off (TTM)
- Establish timeline for testing procedure (TTM)
- Assign tasks to team members (TTM)
  - Testing Manager
    - Data flow
    - Manage testers
    - Testing schedule
    - Team liaison
  - Bug tracking software admin
  - Script editor
  - Test CD Production Manager
- Initiate contact with other teams for consultation throughout
  Fall Crush (Core, Design, Installer, Documentation) (TTM)
- Bug tracking software (BT)
  - Review previous year’s software
  - Determine retention or replacement
  - Evaluate/test new software candidates
  - Set implementation schedule
- Establish business rules for procedures (BT/TP)
  - Develop data flow for raw data
  - Determine format for bug tracking entries

March
- Documentation Team Kick-off (EE)
- Develop testing schedule (TP)
  - Scheduled Summer/Fall testing back-to-back
- Establish CD burn schedule (summer and fall) (BCP)
- Establish CD burn folder structure (BCP)
• Reserve Standards Lab (TP)
• Begin Script Installer (SD)
  o Review previous year’s scripts
  o Identify scripts needed
  o Establish new parameters and changes
  o IncoPRorate changes into new scripts
• Develop training materials for testers (TC)
• Identify tester candidate pool (TC)
• Recruit candidates (TC)
• Train testers (TC)

April
• Maintain contact/dialog with various teams (Core, Design, Installer, Documentation) (TTM)
  o Core Team
    ▪ Coordinate schedules with other teams
  o Installer Team- CD content
    ▪ Review content with Installer team
    ▪ Request input on testing parameters from Installer Team
  o Design Team- CD flow
    ▪ Review CD flow with Design Team
    ▪ Request input on testing parameters from Design Team
  o Documentation Team
    ▪ Review current CD documentation
    ▪ Determine any new content
    ▪ Request input on testing parameters from Documentation Team
• Installer CD Burn begins (BCP)
• Installer CD Testing begins (TP)
• Edit/adjust scripts as necessary for Installer CD testing (SD)

May
• Maintain contact/dialog with various teams (Core, Design, Installer, Documentation) (TTM)
  o Core Team
  o Installer Team
    ▪ Maintain bug data flow
    ▪ Changes
  o Design Team
    ▪ Maintain bug data flow
    ▪ Changes
June

- Maintain contact/dialog with various teams (Core, Design, Installer, Documentation) (TTM)
  - Core Team
  - Installer Team
    - Maintain bug data flow
    - Changes
  - Design Team
    - Maintain bug data flow
    - Changes
  - Documentation Team
    - Maintain bug data flow
    - Changes
- Reward testers for Summer testing (TC)
- Summer CD to press (TTM)
- Edit/adjust scripts as necessary for Fall CD testing (SD)

July

- Maintain contact/dialog with various teams (Core, Design, Installer, Documentation) (TTM)
  - Core Team
  - Installer Team
    - Maintain bug data flow
    - Changes
  - Design Team
    - Maintain bug data flow
    - Changes
  - Documentation Team
    - Maintain bug data flow
    - Changes
- Fall CD burn begins (BCP)
- Fall CD testing begins (TP)
- Reward testers for fall testing (TC)
August
  • Fall CD to press (TTM)

October
  • Fall wrap-up (PR)
    o Review Crush process
    o Lessons Learned
    o Review Best Practices
    o Determine changes/improvements for next year