

Cuyahoga County Department of Children and Family Services (CCDCFS)

POLICY STATEMENT

POLICY NO: 12.04.02	SUBJECT: Internally Developed Software Releases
APPROVED BY: James McCafferty	Information Services
EFFECTIVE DATE: April 3, 2006 REVISION DATE: March 23, 2007	

PURPOSE: The purpose of this policy is to provide guidelines for software maintenance and upgrade and to provide procedure for incorporating system enhancements, changes and bug fixes into the new release of the software.

SCOPE: This policy pertains to all internally developed software systems. This policy excludes commercially licensed applications, ad hoc reports, and/or data requests.

POLICY

- A. All requests for software change or enhancement must be initiated using the Management Information Change Request form and must be approved by the respective deputy of the area making the request.
- B. All system changes (Family and Children Tracking System and Fiscals) must go thru the three stages in the development cycle from Development to Test to Production.
- C. All source code must be stored in Visual Source Safe in the appropriate directories (Dev, Test and Production). Source code must be synchronized between production server and Visual Source Safe.
- D. Software Releases are scheduled periodically to implement in production new system enhancements and changes for use by all system users.
- E. An unscheduled interim release may be deployed in case fatal software error occurs that must be fixed to allow users to continue with their normal duties using the software.
- F. Software releases are deployed over a weekend, early in the morning or late evenings to minimize the impact of downtime.

PROCEDURES

- A. All change requests approved by the deputy of the respective area, are entered by Information Systems staff into the Change Request system for tracking.
- B. Change Requests are reviewed by IS Change Management Committee on a monthly basis. During the review change requests are disposed off as follows:

Approved – Change request is approved, prioritized and assigned to an appropriate resource for development work to begin. Priorities are set as appropriate to ASAP, High, Medium or Low. Status of the change request is updated in the Change Request system to “Approved” by the project manager or designee.

Investigation – Further information and/or clarification of requirements is needed. Request is assigned to an analyst for investigation and the status in the Change Request system is updated to “Investigation”.

Rejected – Change request is rejected. Status and reason for this action is updated in the Change Request system. Requestor is notified of the status.

On Hold – Change request may be put on hold pending additional information or management decision. Status is updated to “On Hold” in the Change Request system.

During the development phase, Change Request status is updated as follows:

Construction – When development work is started on the change request, status is updated to “Construction” in the Change Request system by the developer.

Ready for Testing – When the development work is complete and it is ready for system testing, status of the CR is updated to “Ready for Testing” by the developer. Test plan for change request is entered into the Change Request system. All modules and database objects affected or added are also specified in the Change Request system.

Testing – Project manager or designee changes the status to “Testing” for all those change requests that were marked “Ready for Testing” by the developers. Change requests with “Testing” status are assigned to various staff members for system testing.

Complete – After a change request is implemented in production via the software release process, status is updated to “Complete” by the project manager or designee.

- C. Release plan is prepared by the project manager and distributed to the project team. The plan lays out the timeframe and responsibility for development cutoff, test environment setup, system testing and distribution of release.

- D. All development work and unit testing is required to be completed by the development cut off date specified in the release plan. All source objects used in the development effort must be checked into Visual Source Safe. All Oracle Forms and Reports unit testing by developers must be performed on the development server.
- E. Report of all database objects and modules to be moved from Development to Test environment is generated by the project manager or designee.
- F. All database objects, executables and other supporting files are migrated from Development system to Test system. Developers create the new executable.
- Oracle Database Changes and PL/SQL Stored Programs: Apply to the test database instance and recompile all dependent objects
 - Delphi: Place new executables in the Alpha testing folder
 - Crystal Reports: Place new/changed Crystal objects in the Alpha\Reports testing folder
 - Structured Decision Making (SDM): Place executables and supporting objects in the Alpha\SDM testing folder
 - Oracle Forms and Reports: Place all source objects in the appropriate source directories on the test server. Compile all Oracle Forms and Reports objects, but only after database objects have been migrated and compiled. Then move compiled objects to the appropriate executable directories.
 - Track-It: Deploy Service Center changes to the Track-It web server, apply Track-It database changes and PL/SQL stored programs to the test Track-It database, and recompile all dependent objects
 - Smeadlink: Apply database changes to the test Smeadlink database
 - Imaging Viewer Application: Deploy to the test imaging viewer web servers
- G. Once the test system is setup, analysts perform the system testing to ensure that all new changes and enhancements are functioning as expected and the existing system functionality is intact.
- H. User acceptance testing for change requests shall be conducted as a part of pre-release testing, as warranted..
- I. Release readiness review is conducted by the project manager prior to scheduled release date. The purpose of this review is to assess readiness for release and make a “Go/ No Go” decision. Depending upon the testing status, items may be added or deleted from the release.
- J. All database objects, executables and other supporting files are migrated from Test system to Production system. All Oracle Forms and Reports source objects are moved to the appropriate production and backup production directories on the production and backup production servers. These objects are compiled and moved to the appropriate executable directories, but only after the database objects have been migrated and compiled. Similarly all source code is moved from Test to Production in the Visual Source Safe.
- K. Release is distributed via Novell Application Launcher (NAL) job to all users in JEH and the deployed sites by the network manager early morning on the scheduled date for Delphi,

Crystal Reports, and SDM objects. Oracle Forms and Report objects are already available on the production server.

- L. Quick testing is performed by the systems analysts and other team members to ensure that the distributed software is functioning as expected.
- M. New release announcement is sent to all users via “broadcast” email. Release notes consisting of a brief description of the changes and enhancements included in the release are distributed by the project manager or designee to all users. Release notes are also published on the CCDCFS intranet.

Cross References to Other Policies

Management Information Change Request – CCDCFS Policy No. 12.05.02

Reviewed 3/23/07