PREDICT
Portal Evolution and System Testing

1   PREDICT Portal Evolution

Since the launch of the PREDICT portal in March 2008 we have had three major refinements of functionality that automated data collection processes and increased efficiency of the work flow. Table 1, which is excerpted from the PREDICT baseline tracking matrix, shows the dates and system versions of these changes.

Table 1: PREDICT Timeline of New Releases.

Date	Baseline	Event	DNN Framework	.NET	System
12/6/04	Predict v1.0	Pilot system			
3/5/08	Predict v2.0	Launch	v2.1.2	v1.1	v2.1.3
2/25/09	Predict v3.0	Upgrade	v4.7.0	v2.0	v3.0
11/2009	Predict v3.1	Upgrade	v4.7.0	v2.0	v3.1
1/27/10	Predict v4.0	Upgrade	v5.1.x	v3.5	v4.0

1.1 Web Site

The main enhancement to data collection via web pages is that the three pages originally used to add a dataset (DHS Form 10030) and update data provider and host information (DHS Forms 10033 and 10034, respectively) were consolidated into one form, the My Datasets Page (DHS Form 10033 – requested by DHS Forms Management Office to utilize 1 of the 3 existing form numbers for the new consolidated form). The information collected on these pages was not changed but the ease of use was greatly increased.

Also, the proposed Annotate Dataset form (DHS Form 10031), which was never implemented, was officially deprecated from the requirements. There are no plans to implement this form.

1.2 Legal Documents

The main legal documents, which are sent to PREDICT Portal users via system emails, have been updated since the launch but the information collected (signature and contact information) remains unchanged.

Original legal documents delivered by the system include Sponsorship and Authorization letters associated with account requests, a Memorandum of Agreement (MOA) associated with a dataset request and MOAs associated with the roles of data provider and data host.

In version 4.x, we will be adding extension requests, MOA amendment and a data destruction certificate.

Table 2 shows the web site and legal data collection artifacts and their changed status for renewal.

Table 2: PREDICT Data Collection Artifacts.

Form	Current Number (expires 8/31/2010)	Status for Renewal	Artifact
Account Request Form	DHS Form 10029 (12/07)	active	Web page
Add a New Dataset Form	DHS Form 10030 (12/07)	deprecated	Web page
Annotate Dataset Form	DHS Form 10031 (12/07)	deprecated	Web page
Request a Dataset Form	DHS Form 10032 (12/07)	active	Web page
Update Host Data Form	DHS Form 10033 (12/07)	deprecated	Web page
Update Provider Data Form	DHS Form 10034 (12/07)	deprecated	Web page
My Datasets Page (contains forms)	DHS Form 10033 (12/07)	consolidation of previously approved 10030, 10033,10034	Web page
Memorandum of Agreement PREDICT (PCC) Coordinating Center and Researcher/User	DHS Form 10035 (12/07)	active	PDF
Memorandum of Agreement PCC and Data Provider (DP)	DHS Form 10036 (12/07)	active	PDF
Memorandum of Agreement PCC and Data Host (DH)	DHS Form 10037 (12/07)	active	PDF
Authorization Letter for Data Host	DHS Form 10038 (12/07)	active	PDF
Authorization Letter for Data Provider	DHS Form 10039 (12/07)	active	PDF
Sponsorship Letter	DHS Form 10040 (12/07)	active	PDF
Notice of Dataset Access/Application Expiration	DHS Form 10041 (12/07)	New in v4.x; did not exist before then	PDF
Certificate of Data Destruction to be used for the collection of information	DHS Form 10042 (12/07)	New in v4.x; did not exist before then	PDF
Notice of Amendment to R-MOA	DHS Form 10060 (04/10)	New in v4.x; did not exist before then	PDF
Notice of Data Access Expiration	DHS Form 10061 (04/10)	New in v4.x; did not exist before then	PDF

2   PREDICT Testing

All changes to the PREDICT system are fully tested before release to the production website. Testing is performed under a defined System Development Life Cycle for the project (PSP 09303-013), which requires a test plan, test scripts and test summary report for all releases. In addition, these changes were tested by the PREDICT program PIs to evaluate the usability and effectiveness of the updates.

The website also undergoes thorough testing for compliance with Section 508 (29 U.S.C. '794d) of the Rehabilitation Act of 1998.

Testing records include a traceability matrix that maps each requirement to the design specification and the test cases designed to verify it has been built. Table 3 shows an excerpt of the matrix for the Website changes associated with forms 10030, 10033 and 10034.

Table 3: PREDICT Traceability Matrix Excerpt.

			Requirements		Design		Testing
Date Added	**Requirement**	**Ver**	**Functional Area**	**Functional Req**	**Doc Section**	**User Action**	**Test Case**
2/11/08	A data provider page will display dataset details and associated providers, in addition to start and expiration dates for data requests.	3.0	3.2.6	PR5	2.4		DPT_TS1_TC1_Provider DPT_TS1_TC2_Provider DPT_TS1_TC3_Provider DPT_TS1_TC4_Provider DPT_TS1_TC5_Provider
2/11/08	A data host page will display details associated with hosts, including a listing of researchers who have been approved for data transfers from each host.	3.0	3.2.6	PR6	2.5		DHT_TS1_TC1_Host DHT_TS1_TC2_Host
2/11/08	A Bulk Upload page will display a summary page that lists details for the uploaded file.	3.0	3.2.6	PR7	3	3.2	DS_TS1_TC1_Provider DS_TS1_TC2_Provider DS_TS1_TC3_Provider DS_TS1_TC4_Provider DS_TS1_TC5_Provider
2/11/08	The Bulk Upload page will add a "self-hosted" field to upload schema to note that the provider who uploads a dataset also wishes to host it.	3.0	3.2.6	PR8	3	3.5	DS_TS1_TC1_Provider