

Bucket Management Tool Design

ODU DLIBUG group

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1 overview

The purpose of this document is to define the software and interface design of bucket management tool. It's part of bucket tool software design.

2 Applicable documents

2.1 System design document

<http://www.cs.odu.edu/~dlibug/documents/collection/bucket/design.doc>

Overarching system design for the bucket tools, this document is focusing on relationships between different tool and security model. Reading system design document is preferred.

3 Functional design

3.1 User login

Only member of manager group may login to management tool. The implementation is based on web server security model.

(Questions: Shall different manager use same staging archival? Or different manger has different staging archival? This is related to author tool.)

3.2 Bucket View/Selection

- List all buckets in staging archival, in this step, only some fields will be shown (*Questions: which fields should be shown?*)
- Browse metadata, package and element of a specific bucket.

3.3 Set bucket term & condition

There are two steps:

- Template selection: Manager can select pre-defined term & condition. Currently, pre-defined term & condition includes: (i) anyone readable and nasa editable. (ii) nasa readable and nasa editable.
- Fine-grained definition: Manager can fully exploit flexibility provided by bucket security api, which includes ip/host/user/group/method combination.

3.4 Set Bucket id

Before publication, manager should appoint bucket id defined by manually procedure.

3.5 Approve bucket

If bucket is ready to publish, manager can approve and move it from staging archival to published archival.

4 Interface design

4.1 Login

The diagram shows a rectangular box containing three smaller rectangular input fields. The first field is labeled 'Username' and is positioned at the top left. Below it is a field labeled 'Password'. To the right of the 'Password' field is a field labeled 'Sign-in'.

4.2 Select bucket in staging archival

Bucket ID	Creator	Submission Date	Title
Nasa-tr-1231(Link to specific bucket)	Tom	12/09/99	Distributed system

4.3 Show bucket information in detail

This will call bucket display method.

Frame 1.
like: bucket/index.cgi?method=display

Frame 2.

Accept and continue

Reject

4.4 Select bucket t&c

Select from pre -defined t&c

Special t&c setup

Continue

4.5 Special t&c setup

Method

IP

Dns/host

User/pass

Group

Package/element

Continue

4.6 Assign ID

Input ID

Re-input ID

Continue

4.7 Approve

All Bucket information
<input type="button" value="Approve"/> <input type="button" value="Postpone"/>

5 Appendix

5.1 Existed management tool

By Ajoy, <http://dlib.cs.odu.edu:8000/buckets/manage.cgi>

By Liu, <http://www.cs.odu.edu/~dlibug/related/BMAT.html>