

Data-PASS SSP Use Case 8 – rough draft

lockss-1.icpsr.umich.edu

IP Add 141.211.192.52

Commitment 1700



Invitation AU0a, AU0b, AU1a, AU1b

lockss-2.icpsr.umich.edu

IP Add 141.211.192.53

Commitment 1700



Invitation AU0a, AU0b, AU1a, AU1b

props.irss.unc.edu

IP Add 152.2.32.234

Commitment 39



Invitation AU0a, AU0b, AU1a, AU1b

dris.irss.unc.edu

IP Add 152.2.32.233

Commitment 39



Invitation AU0a, AU0b, AU1a, AU1b

Machine Ownership Key	
	ICPSR
	Odum Institute

Each host will compile three tables internally:

*The AU table--Each AU has one entry in this table.

Host		AU Table			
AU	Latest Version	Status	Time	Max Promised Size	Actual Size

*The AU version table--Each AU has one table, and each version has one line on this table.

Host		AU Version Table		
Version #	Avg Harvest Time	Max Promised Size	Actual Size	

*The AU version event table--Each version of an AU has one table, and each event has one line.

Host		AU		Version		Event Table	
Event	Time	Max Promised Size	Actual Size				

When an event occurs, a new entry will be made for that event in the AU Version Event Table. Events are logged by the hosts are internal LOCKSS events *inter alia*:

- *InvitationReceived
- *InvitationAccepted
- *InvitationRejected
- *HarvestStart
- *HarvestOverrunStop
- *HarvestCompletion
- *HarvestFailure
- *PollCalled
- *PollInvited
- *PollVoted
- *PollClosedWin
- *PollClosedLoss
- *PollClosedInconclusive
- *PollFailure
- *RepairStart
- *RepairFinish
- *RepairVerifiedInternally
- *RepairFailure

The Reporting Server may request a LOCKSS host send it any of its tables. It need specify:

```
AUTable();
AUVersionTable(AU_ID);
AUVersionEventTable(AU_ID, [Avg_Harvest_Time | Version_ID]);
```

External auditing features must be carried out wholly by a reporting or auditing server. The auditing system can accomplish this functionality by crawling LOCKSS proxy and comparing this crawl to the current version on the Internet.

Alternatively, these features can be accomplished by requesting AU versions from each LOCKSS box. Valid AU versions would be those whose last events were PollClosedWin or RepairVerifiedInternally.

Example:
Give a report on AU0 from lockss-1.

```
lockss-1.AUTable();
```

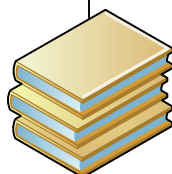
Host lockss-1 AU Table					
AU	Latest Version	Status	Time	Max Promised Size	Actual Size
0	b	PollVoted	2345678901	7	6.2
1	b	PollWon	8945575552	2	2

```
lockss-1.AUVersionTable(AU0);
```

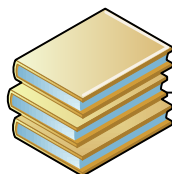
Host lockss-1, AU 0 Version Table			
Version #	Avg Harvest Time	Max Promised Size	Actual Size
a	arbitraryTimeA	5	5
b	arbitraryTimeB	7	6.2

```
lockss-1.AUVersionTable(AU0, arbitrary_time);
```

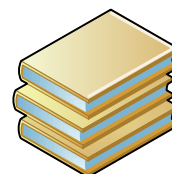
Host lockss-1, AU 0, Version b Event Table			
Event	Time	Max Promised Size	Actual Size
InvitationReceived	t0	7	0
InvitationAccepted	t1	7	0
HarvestStart	t2	7	0
HarvestCompletion	t3	7	6.2
PollInvited	t4	7	6.2
PollVoted	t5	7	6.2



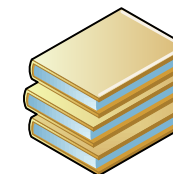
Title AU0a
Size 5



Title AU0b
Size 7



Title AU1a
Size 2



Title AU1b
Size 2