

## Required Updates to the Signature Checker – for R5.1

We have identified the following updates and features for the signature checker.

The signature checker is a PHP script that resides in the dlr/EDIT directory. The signature checker will be run with the calendar option by a nightly cron job in the dlr/SIGS directory that will send mail notifications to a group of interested people.

- The subject of these mail messages should indicate on which server the checker has been run.
- The subject line should alert the reader if there are one or more signature failures. (Note: any signature failures will be logged also through the alerting system, which will notify the collection manager of the object with the signature failure.)
- We need a way to show clearly when all signatures have been verified. The email message should indicate that this is “pass 1 of n”, “pass 2 of n”, where n equals the number of passes to complete a check of all signatures.
- The email messages should make it clear that the signatures are for archival *datastreams* and not *objects*, and that therefore the number of datastreams may be different from the number of objects being tested on a given day.
- Only objects with signatures that have passed or failed will be highlighted in the email messages, though all tested objects will be listed in the daily web log files, Mon.html, etc.

Issues.

In order to implement the features listed above, we will need to deliver the SIGS directory with an updated cron script as part of the dlr/EDIT package. The cron will be tested on the Linux servers before delivery.

We need to revisit the issue of allowing API-A services in Fedora. The “security flaw” that caused us to restrict API-A access is reported by the Fedora group to have been fixed in Fedora 3.x releases. We no longer have any pressing reason to restrict such access while we do have reasons that would make it desirable. The newest signature checker handling RARCH datastreams, for instance, was designed to take advantage of native Fedora API-A access to archival datastreams, and cannot fully function without them. Our plan to maintain generic XACML policies in special Fedora objects (a method now recommended by the Fedora community) also relies on API-A access to such datastreams. Any use of actual Fedora disseminator functions requires API-A access. Any future use of RELS-EXT probing methods, e.g., getRelationships, may require such access.

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