

## Lotus Notes Processing

Lotus Notes (aka NSF) files are a well known challenge when processing electronic data. Many service providers simply turn them into PST files—thereby losing significant information, generating images which may be cut-off and running a high risk of producing a flawed deliverable. Even if the processing platform handles Notes email stores natively, it may miss both documents and data by treating an NSF as an email store instead of what it really is—a database and an application platform that happens to be used for messaging. Moreover, almost no one has a good method for processing Lotus Notes applications and yet an application such as a Sales Order management system may be responsive and contain information pertinent to a case.

## Why Lotus Notes is Different

Lotus Notes was designed as a collaborative work environment and messaging platform on top of which applications that require the communication and sharing of information can be developed. It is often used as an email system but this is not its primary function and consequently it behaves and is architected differently from applications built around emailing (e.g. Microsoft Outlook). At the heart of Notes is a database which can store many types of data including forms, user interface controls, database views, rules etc. and an almost unlimited set of metadata fields. Indeed there are no standard metadata fields associated with Lotus Notes documents: they are whatever the application creator found useful to employ. Last but not least, being a database means that as well as conventional foldering for organizing documents, Lotus also supports views; which are virtual, dynamic collections created when a database query is executed.

## Missing Documents

One of the biggest challenges when processing NSF files is ensuring that all documents are processed. Many users believe that processing the ALL Documents folder will produce everything in the database but it may not, as users can change the query that creates the folder to exclude particular document types or metadata. Indeed because Notes folders are database queries and views rather than containers, there may well be documents in the Notes database that are not in *any* folder. The only way to produce all documents reliably and accurately is to make use of the records in the NSF database

Total no. of Documents in NSF = 2967 <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">1</span>			
Number of Documents / Folder & Views			
Folder / View	Notes UI Folder / View	Count	Selection Formula
{SAJarms}		73	
{SAJl}	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">2</span> All Documents	841	<div style="border: 1px solid red; padding: 5px;"> <p>REM [Boon-begin-replaced orig code with code below- related change is removal of option in calendar profile];            SELECT @!sNotMember("A"; ExcludeFromView) &amp; !sMailStationery != 1 &amp; Form != "Group" &amp; Form != "Person" &amp; Form != "Notice" &amp; Form != "Appointment" &amp; Form != "(ReplyNotice)" &amp; Form = "Memo" ;            REM [Boon-end];</p> <p>REM [Boon-begin-orig code ... SELECT @!sNotMember("A"; ExcludeFromView) &amp; !sMailStationery != 1 &amp; Form != "Group" &amp; Form != "Person" ... Boon-end];</p> </div> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">3</span>

Sample report after LEX Deep Extraction of Lotus Notes showing: (1) 2967 unique documents in the NSF database; (2) 841 documents in the 'All Documents' folder and (3) the query behind the 'All Documents' folder showing the modifications made to exclude certain document types such as Appointments and Notices.

## Missing Messages

Identifying which NSF documents are emails is not by any means straightforward. Lotus Notes comes with a number of predefined templates which are used to create and display messages. The default template for email messages is known as R6. However, users of Lotus can modify this template or use other custom templates to send email messages. This means that there are likely to be more email messages than documents based on the R6 template. Indeed studies show that fewer than 30% of messages or responses to messages will be based on R6. Unfortunately most processing systems only look for the R6 template when identifying emails. Consequently, many messages may be missed.

## The LEX Approach : Deep Extraction

LEX On Demand is pioneering a new approach to all processing—whether of documents, emails or files—that we call “Deep Extraction”. For each type of processable item, we have developed methods to extract all the metadata, not just a limited, so-called “standard” subset, and to represent it in a database where it can be queried and reported. We do not normalize metadata fields across item types but leverage the different information available in each. In the case of Lotus Notes, by extracting from the database directly, we are able to mine every piece of metadata, no matter how non-standard or customized, and in this way, provide a complete view of the data set. For example, most conventional processing systems miss the organizational and location (country and company) information associated with Notes messages.

Metadata Detail	
Metadata Name	Metadata Value
\$AutoSpell	1
\$Fonts	
\$Mailer	Lotus Notes Release 5.0.3 (Intl) 21 March 2000
\$MessageID	<OFD7491F43.F2B71C89-ON86256BD1.0036E878@LocalDomain>
\$MFR	1
\$MsgTrackFlags	2
\$Orig	852572CF0060761A86256BD10036E878
\$Revisions	
\$Signature	
\$StorageCc	-
\$StorageTo	1
\$UpdatedBy	
\$UpdatedBy	CN=Hounml15.na.Boon.com/OU=S/O=BoonInc
AltFrom	CN=Salvatore Tessio/OU=U-Corleone/O=BoonInc
Authors	CN=Hounml15.na.Boon.com/OU=S/O=BoonInc

## The LEX Solution : Notes Monster

LEX Notes Monster is an application for processing Lotus Notes emails and databases natively based on LEX’s Deep Extraction methodology. It extracts all metadata from the NSF and records it in a SQL database from which metadata information can be selected as required and used when processing and to create the final deliverable. In addition, Notes Monster is able to produce both PDF and text renderings of Notes messages and database views without the need for Lotus to be available on the desk top. Unlike the HTML views, the PDF images retain the look-and-feel of the Notes document. Notes Monster reports include detailed listings and summary reports of the metadata and in themselves provide a useful analysis and overview of the data set.

