



# Xetrion Lock Manager V2.8

## Document Locking in Lotus Domino Applications for Notes and Web Clients

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### Product features

#### Key features

- ✓ Document locking in Lotus Domino databases for **Notes and Web clients**
- ✓ Easy implementation in every Domino database, even existing ones, at best without any coding
- ✓ Fast and safe for mass data processing, e.g. in server agents
- ✓ **“Check alive”**: Documents are unlocked automatically if they are no longer alive after client system crashes (e.g. lost power supply) or due to broken client network connections
- ✓ **“Maximum edit time”**: Documents are unlocked automatically when the maximum lock time (configurable) has been reached
- ✓ No influence on the native behavior of documents in your Domino databases except for adding locking functionality (only three additional documents)

#### Administrative features

- ✓ Easy administration
- ✓ Configurable end user texts
- ✓ Multiple language support
- ✓ New auto unlock features reduce administrative attention to a minimum
- ✓ **“Full database lock”** to lock an entire database for administrative purposes without need to modify the ACL

### Do you need document locking?

Do you have problems with save conflicts or data inconsistency in your Domino databases due to concurrent updates of the same document at the same time by users or agents? Do you spend a lot of your valuable time in resolving save conflicts or repair data inconsistency manually?

### What is Xetrion Lock Manager?

Xetrion Lock Manager is a professional solution for reliable document locking in Lotus Domino databases for **Notes and Web clients**. It securely prevents more than one user or server agent from changing a document at the same time.

### How does Xetrion Lock Manager work?

When two or more users or agents edit or update the same document in a Lotus Domino database at the same time a save or replication conflict occurs. In Web applications the second save operation may overwrite the data of the first (leading to data loss and inconsistency).

Lotus Domino/Notes Release 4.x/5.x do not have the native ability to lock documents to prevent such conflicts and data inconsistency. In fact Domino/Notes 6 introduces a new built-in document locking feature, however it only works for Notes clients but not for Web applications.

Xetrion Lock Manager automatically prevents that more than one user or agent can change a document at the same, no matter if a **Notes or Web client** is used.

Whenever a user tries to set a document in edit mode (or to delete it) or an agent wants to update or delete a document, Xetrion Lock Manager checks if this document is currently being locked by another user or agent. If so, Xetrion Lock Manager prevents any edit, update or delete operation on that document and displays a “that document is locked” message (in background agents it returns an error code). If the document is not locked, it will be locked for the time of the edit operation thus preventing other users or server agents to change that document at the same time.

When being closed documents are unlocked immediately, i.e. in Web browsers by either navigating away or closing the browser window.

### How to administrate Xetrion Lock Manager?

The following features help to reduce administrative attention to a minimum:

- **“Check alive”**: Automatically unlocks documents which are no longer “alive” due to client system crashes (e.g. lost power supply) or broken client connection (e.g. permanent network problems).
- **“Maximum edit time”**: Automatically unlocks documents which reached the maximum lock time configured in Lock Manager Setup. This sets a time limit on editing a document by one user.

## Implementation features

- ✓ Xetrion components become part of your database design and thus can easily be deployed to end users
- ✓ Implemented completely on an object oriented class model with Domino standard design elements and not requiring any extra installation

## System requirements

### Notes applications (on all platforms)

- Lotus Domino Server 4.5 – 7.0
- Lotus Notes Client 4.5 – 7.0

### Web & mixed client applications

- Lotus Domino Server 5.0 – 7.0 on all platforms
- Microsoft Internet Explorer 5.0 and higher

## Limits and restrictions

- ✗ If used in Domino < 6 no support of cross database replica locking (i.e. Xetrion Lock Manager cannot prevent replication conflicts).
- ✗ No Java interface for Java based agents.

## Licensing and ordering

- We provide a free evaluation copy (see right column).
- If you want to use this software after the 90-day-evaluation period you do not have to download or implement it again. All you need is a license key that turns your evaluation copy into a fully functional product.
- For more information about license types, pricing and online ordering of license keys see [www.xetrion.com](http://www.xetrion.com).

All locks are maintained in the Server Lock Table which lists all locked documents at this server. Administrators can unlock documents manually.

| No. | AUS | Locked since        | Locked by        | Object Title              | Last Alive Check    | Object Id                         |
|-----|-----|---------------------|------------------|---------------------------|---------------------|-----------------------------------|
| 1   |     | 04.01.2003 11:15:43 | Brain McGulden   | Order 2002-01232A         | 05.01.2003 09:25:41 | 5AAAA3BD22C281A6C1256CCA00511878  |
| 2   |     | 05.01.2003 09:15:47 | Janice Brown     | Order 2002-01344E         | 05.01.2003 09:25:41 | 376432E8E795AFAC1256CCA00511AE2   |
| 3   |     | 05.01.2003 09:17:00 | Mike O'Brian     | Delivery note 2002-4322S  | 05.01.2003 09:25:42 | D1340F7260403220C1256CCA00511A70  |
| 4   |     | 05.01.2003 09:18:41 | Janice Brown     | Order 2003-00001A         | 05.01.2003 09:25:42 | 428EEF883CF5784C1256CCA00511A70   |
| 5   |     | 05.01.2003 09:18:56 | Jack Walkers     | Note 12-13-45D            | 05.01.2003 09:25:42 | 7635E11826064C77C1256CCA00511B8D  |
| 6   |     | 05.01.2003 09:19:12 | Allison Collins  | Order 2003-00002F         | 05.01.2003 09:25:43 | 770878B1E0332D3C1256CCA00511A62   |
| 7   |     | 05.01.2003 09:19:33 | Enol Chandor     | Delivery note 2003-00001Z | 05.01.2003 09:25:43 | 988780488E953897C1256CCA00511B9F  |
| 8   |     | 05.01.2003 09:19:45 | Steve Williamson | Order 2002-6549G          | 05.01.2003 09:25:43 | A18F08F68C68888C1256CCA00511A8D   |
| 9   |     | 05.01.2003 09:21:22 | Jack Walkers     | Order 2003-00011S         | 05.01.2003 09:25:44 | 46F3148486A68F03C1256CCA00511B8B6 |
| 10  |     | 05.01.2003 09:25:41 | John R. Hewings  | Note 13-44-66T            | 05.01.2003 09:25:44 | 994D01128723659C1256CCA00511B80   |

\* Auto unlock status (AUS)  
M Max lock time exceeded  
A Client is not alive

Figure 1: Server Lock Table

A useful feature for administrators is the possibility to lock the entire database for administrative purposes thus preventing document changes by end users without modifying the database ACL temporarily.

Xetrion Lock Manager configuration is very simple. All user messages are configurable and multiple languages are supported.

**Lock Manager Setup**

**Settings**

If client is not alive auto unlock after (0 = no auto unlock): 0 minutes  
 Max lock time (0 = not limited): 1 minutes

Use standard handler to prevent the saving of documents which were unlocked by admin or auto unlock:  For Notes Clients  
 For Web Clients

Use Lock Manager in this database:  Enable locking  
 Disable locking

**System Settings (change carefully)**

Max time to wait for a busy Lock Manager: 5000 milliseconds  
 If Lock Manager is busy by operation again after: 200 milliseconds  
 Lock Manager Version: 2.5.0

**Message Texts**

Multiple language support

**Event: Document is locked**

Message title: Document is locked  
 Message text: This document is currently being edited by %LockedBy%. Try again later, please %NewLine% %NewLine% Document has been locked since %LockedSince%.

**Event: Document was modified meanwhile (at switching from read to edit mode)**

Message title: Document was modified  
 Message text: This document was modified by another user meanwhile. Therefore you must reopen document in order to edit it.

**Event: Entire database is locked by administrator**

Message title: Database is locked  
 Message text: The entire database is currently locked for administrative purposes, i.e. changes to documents or creation of new documents are not permitted %NewLine% %NewLine% Database has been locked since %LockedSince%.

**Event: Document was unlocked by administrator or by auto unlock**

Message title: Database is unlocked  
 Message text: The database is now unlocked.

**Event: Document is being loaded (Web only)**

Status text:

Figure 2: Lock Manager Setup

## Interested? Want a free evaluation copy?

Xetrion Lock Manager is licensed software but for evaluation purposes we give you the chance to use Xetrion Lock Manager without any charge for a period of 90 days. The evaluation copy is equal to the fully licensed product in terms of functionality except some copyright messages.

The latest version of this software and a sample database is available for free download at [www.xetrion.com](http://www.xetrion.com).

## Questions?

If you need more information or if you have any questions, feel free to contact us. Mail to: [contact@xetrion.com](mailto:contact@xetrion.com)

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