

HPSA Extension Pack

LockManager - User Reference

Release v.5.1



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Support

Support for the HP Service Activator Extended Pack product is available on the following mailing list:

hpsa-support@hp.com

In This Guide

This guide is meant as a user reference guide for the Lock Manager administration GUI. It contains all the information about this tool, its features and how to use them.

Audience

The audience for this guide is the Solutions Integrator (SI). The SI has a combination of some or all of the following capabilities:

Understands and has a solid working knowledge of:

- UNIX® commands
- Windows® system administration

Understands networking concepts and language

Is able to program in Java™ and XML

Understands security issues

Understands the customer's problem domain

Conventions

The following typographical conventions are used in this guide.

Font	What the Font Represents	Example
<i>Italic</i>	Book or manual titles, and man page names	Refer to the <i>HP Service Activator — Workflows and the Workflow Manager</i> and the <i>Javadocs</i> man page for more information.
	Provides emphasis	You <i>must</i> follow these steps.
	Specifies a variable that you must supply when entering a command	Run the command: InventoryBuilder <sourceFiles>
	Parameters to a method	The <i>assigned_criteria</i> parameter returns an ACSE response.
Bold	New terms	The distinguishing attribute of this class...
Computer	Text and items on the computer screen	The system replies: Press Enter
	Command names	Use the InventoryBuilder command ...
	Method names	The get_all_replies() method does the following...
	File and directory names	Edit the file \$ACTIVATOR_ETC/config/mwfm.xml
	Process names	Check to see if mwfm is running.
	Window/dialog box names	In the Test and Track dialog...
	XML tag references	Use the <DBTable> tag to...
Computer Bold	Text that you must type	At the prompt, type: ls -l
Keycap	Keyboard keys	Press Return .
[Button]	Buttons on the user interface	Click [Delete]. Click the [Apply] button.
Menu Items	A menu name followed by a colon (:) means that you select the menu, then the item. When the item is followed by an arrow (->), a cascading menu follows	Select Locate:Objects->by Comment.

Install Location Descriptors

The following names are used throughout this guide to define install locations.

Descriptor	What the Descriptor Represents
\$ACTIVATOR_OPT	<p>The install base location of Service Activator.</p> <p>The UNIX location is /opt/OV/ServiceActivator</p> <p>The Windows location is <drive>:\HP\OpenView\ServiceActivator\</p>
\$ACTIVATOR_ETC	<p>The install location of specific Service Activator configuration files.</p> <p>The UNIX location is /etc/opt/OV/ServiceActivator</p> <p>The Windows location is <drive>:\HP\OpenView\ServiceActivator\etc\</p>
\$ACTIVATOR_VAR	<p>The install location of specific Service Activator logging files.</p> <p>The UNIX location is /var/opt/OV/ServiceActivator</p> <p>The Windows location is <drive>:\HP\OpenView\ServiceActivator\var\</p>
\$ACTIVATOR_BIN	<p>The install location of specific Service Activator binary files.</p> <p>The UNIX location is /opt/OV/ServiceActivator/bin</p> <p>The Windows location is <drive>:\HP\OpenView\ServiceActivator\bin\</p>
\$ACTIVATOR_THIRD_PARTY	<p>The location for new Java components such as workflow nodes and modules. Third-party libraries can also be placed in this directory.</p> <p>The UNIX location is /opt/OV/ServiceActivator/3rd-party</p> <p>The Windows location is <drive>:\HP\OpenView\ServiceActivator\3rd-party\</p> <p>Customized inventory files are stored in the following locations:</p> <p>UNIX: \$ACTIVATOR_THIRD_PARTY/inventory</p> <p>Windows: \$ACTIVATOR_THIRD_PARTY\inventory</p>
\$JBOSS_HOME	<p>HOME The install location for JBoss.</p> <p>The UNIX location is /opt/HP/jboss</p> <p>The Windows location is <drive>:\HP\jboss</p>
\$JBOSS_DEPLOY	<p>The install location of the Service Activator J2EE components.</p> <p>The UNIX location is /opt/HP/jboss/server/default/deploy</p>

	<p>The Windows location is <drive>:\HP\jboss\server\default\deploy</p>
\$ACTIVATOR_DB_USER	<p>The database user name you define. Suggestion: ovactivator</p>
\$ACTIVATOR_SSH_USER	<p>The Secure Shell user name you define. Suggestion: ovactusr</p>
\$SOSA_HOME	<p>The install base location of SOSA. The default UNIX location is /opt/OV/Sosa The default Windows location is <drive>:\HP\OpenView\Sosa\</p>
\$SOSA_BIN	<p>The install location of specific SOSA binary files. The default UNIX location is /opt/OV/Sosa/bin The default Windows location is <drive>:\HP\OpenView\Sosa\bin\</p>
\$SOSA_ETC	<p>The install location of specific SOSA configuration files. The default UNIX location is /opt/OV/Sosa/config The default Windows location is <drive>:\HP\OpenView\Sosa\config\</p>
\$ECP_HOME	<p>The install base location of Equipment Connections Pool. The default UNIX location is /opt/OV/ECP The default Windows location is <drive>:\HP\OpenView\ECP\</p>
\$ECP_BIN	<p>The install location of specific Equipment Connections Pool binary files. The default UNIX location is /opt/OV/ECP/bin The default Windows location is <drive>:\HP\OpenView\ECP\bin\</p>
\$ECP_ETC	<p>The install location of specific Equipment Connections Pool configuration files. The default UNIX location is /opt/OV/ECP/conf The default Windows location is <drive>:\HP\OpenView\ECP\conf\</p>

1 Introduction

1.1 Purpose

This guide is meant as a user reference guide for the Lock Manager's administration GUI. It contains all the information about this tool, its features and how to use them.

1.2 Document Scope

This document is focused on the main features oriented for final users.

1.3 Definitions

1.3.1 Acronyms

MWFM: Micro Work Flow Manager

HPSA: HP Service Activator

EP: Extension Pack

2 General description

2.1 What is the Lock Manager Web?

The Lock Manager Administrator tool (from now on Lock-Manager Web) allows monitoring and administration of all the active locks in the HPSA.

To obtain information about the lock manager, please refer to the document 'LockManager - User Manual'.

2.2 Goals of the Lock Manager Web

The Lock-Manager web is in charge of the following tasks:

Monitoring dynamically all the locks and lockers that are active in the HPSA and also enabling its administration.

Features a system that allows a simple way to manage the adding/deleting of locks.

3 Usage of the Lock Manager Web

3.1 Menus

To access the Lock-Manager Web we must first log on as administrator with the application container.

As we have mentioned before, the application features functionality relative to the locks and lockers, to access this functionality we must first make a list of these locks and lockers.

Therefore the available operations in this application are all located in the 'Search' ('Buscar') - "Lock Manager" menu option, and are divided in two menus: Locks and Lockers, to make a search of the active locks and lockers respectively.



Fig. 1 Lock Manager Menu

4 Lock Management

The application's features are aiding the administration of the active locks of the HPSA, let the user unlock one or several locks at the same time, to activate or deactivate the lock's automatic refresh or to make advanced searches on locks filtering by several fields.

In order to make a list of the active locks we must select the menu option "Search" (Buscar) ' "Lock Manager" ' "Locks" (Bloqueos).



Fig. 2 Lock menu

Next the following table appears:

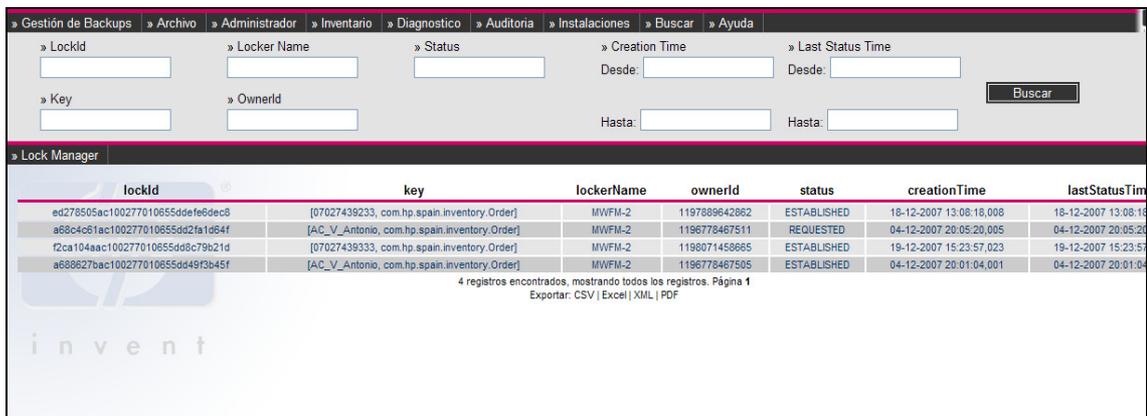


Fig. 3 List of active Locks

The View's menu (Shown in the top part of the screen and between the superior and inferior menu levels) shows a series of fields through we can make a search of locks:

- LockId: Unique identifier for the lock. This identifier is generated automatically by the application.
- Key: Key that identifies a lock in the DB. It is composed of the Primary Key of the locked registry item and the class of the locked Bean.
- LockerName: Name the locker that asked for the lock.
- OwnerId: Unique identifier of the flow that performed the lock (jobId).
- Status: Locks's status.

There are four possible states for a lock:

- Requested. Lock has been requested, waiting for the Lock-Manager service to make the lock. Once made, the lock will go on to the Lock Established status
- Established. Lock established.
- Cancelled. Cancelled lock. Once the Lock Manager executes the lock will disappear.
- Pending. Lock pending unlocking operation.
- Creation Time: The lock's date creation.
- Last Status Time: Reflects the date for the last update of the lock status.

If no field is entered to filter the search of all the locks, all the existing locks will be shown on screen. In the bottom part of the screen the list of active locks is shown.

4.1 Unlocking of the Active Locks

To unlock an active lock we select the required locks or unlocks from the list of active locks (Fig.4 List of active Locks) and we select the "Unlock" option from the menu below.

In the example being shown next, the first and third lock has been selected (by making a simple click with the left mouse button over the required lock) and next we choose the "Unlock" menu option.

lockid	key	lockerName	ownerId	status	creationTime	lastStatusTime
ec8	[07027439233.com.hp.spain.inventory.Order]	MWFM-2	1197889642862	ESTABLISHED	18-12-2007 13:08:18.008	18-12-2007 13:08:18.008
a68c4c61ac100277010655dd2fa1d64f	[AC_V_Antonio.com.hp.spain.inventory.Order]	MWFM-2	1196778467511	REQUESTED	04-12-2007 20:05:20.005	04-12-2007 20:05:20.005
a688627bac100277010655dd49f3b45f	[AC_V_Antonio.com.hp.spain.inventory.Order]	MWFM-2	1196778467505	ESTABLISHED	04-12-2007 20:01:04.001	04-12-2007 20:01:04.001

Fig. 4 Unlocking of the selected locks

Next is shown again the list of active locks, without the ones we have just unlocked.

lockid	key	lockerName	ownerId	status	creationTime	lastStatusTime
a68c4c61ac100277010655dd2fa1d64f	[AC_V_Antonio.com.hp.spain.inventory.Order]	MWFM-2	1196778467511	ESTABLISHED	04-12-2007 20:05:20.005	26-12-2007 12:24:00.000

Fig. 4 List of locks after unlocking

4.2 Activation of the lock refresh feature

Another possible operation to be made relative to the locks is the lock refresh feature with which we can refresh automatically the list of existing locks with the frequency indicated.

To access it, once we have the list of active locks, we must select the option from the bottom menu called 'Activate lock refresh' ("Activar refresco bloques").

In comparison with the unlocking option, we do not need to select any locks beforehand to make the refresh activation.

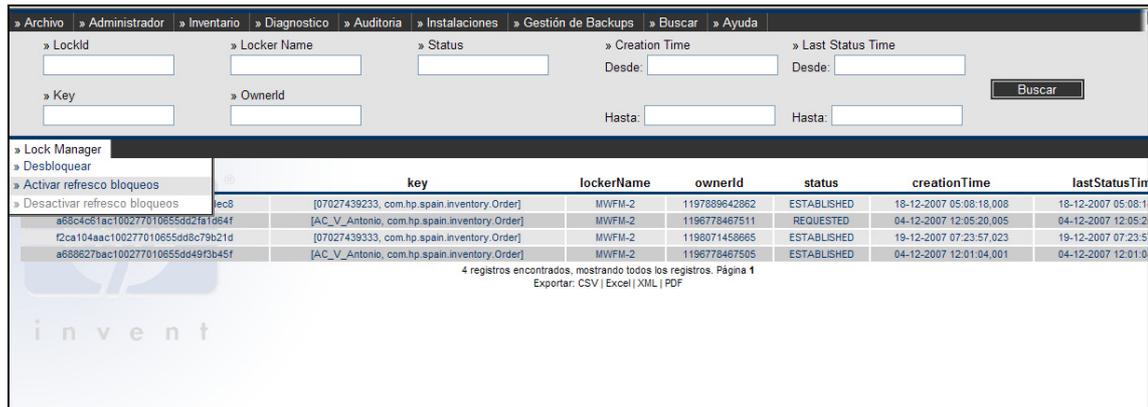


Fig. 5 Activation of Lock refresh option

Next we can see a new field called "Refresh every" ("Refresco cada") with which we can configure the frequency with which we will update the list of active locks. In this way we can monitor dynamically the existing locks in the HPSA.

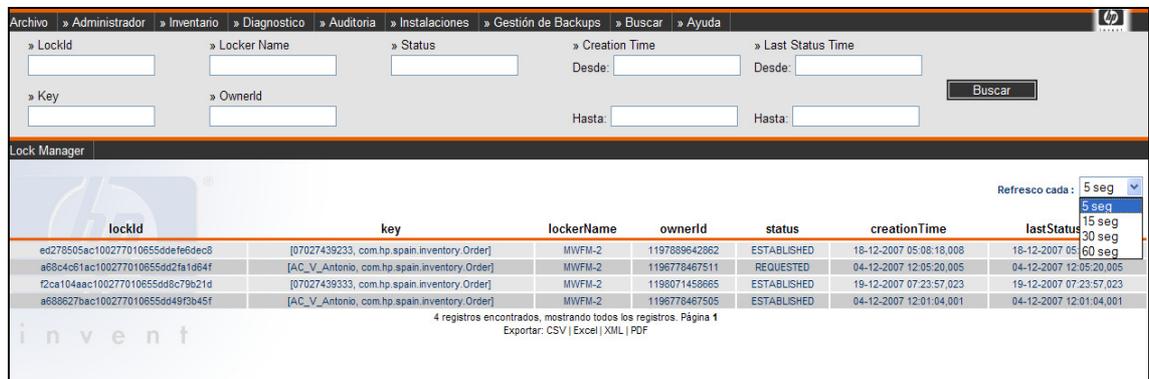


Fig. 6 Lock Refresh

4.3 Deactivation of the lock refresh option

The automatic lock refresh option can be disabled at any given time using the option from the "Lock Manager"'s bottom menu option called "Disable lock refresh". This option is only enabled when the automatic refresh is enabled.

The screenshot shows the LockManager web application interface. At the top, there is a navigation menu with options: Archivo, Administrador, Inventario, Diagnostico, Auditoria, Instalaciones, Gestión de Backups, Buscar, and Ayuda. Below the menu, there are search filters for LockId, Locker Name, Status, Creation Time, Last Status Time, Key, and OwnerId. A 'Buscar' button is located to the right of the filters. Below the filters, there is a dropdown menu for 'Refresco cada:' set to '5 seg'. The main content area displays a table with the following columns: lockId, key, lockerName, ownerId, status, creationTime, and lastStatusTime. The table contains four rows of data. At the bottom of the table, there is a footer indicating '4 registros encontrados, mostrando todos los registros. Página 1' and export options: 'Exportar: CSV | Excel | XML | PDF'.

lockId	key	lockerName	ownerId	status	creationTime	lastStatusTime
ed278505ac100277010655d4dfe6dec8	[07027439233, com.hp.spain.inventory.Order]	MWFM-2	1197789642962	ESTABLISHED	18-12-2007 05:08:18,008	18-12-2007 05:08:18,008
a88c4c61ac100277010655d4d2fa1d84f	[AC_V_Antonio, com.hp.spain.inventory.Order]	MWFM-2	1196778467511	REQUESTED	04-12-2007 12:05:20,005	04-12-2007 12:05:20,005
f2ca104aac100277010655d4d8c79b21d	[07027439333, com.hp.spain.inventory.Order]	MWFM-2	1196071458965	ESTABLISHED	19-12-2007 07:23:57,023	19-12-2007 07:23:57,023
a688627bac100277010655d4d49f3b45f	[AC_V_Antonio, com.hp.spain.inventory.Order]	MWFM-2	1196778467505	ESTABLISHED	04-12-2007 12:01:04,001	04-12-2007 12:01:04,001

Fig. 7 Deactivation of the automatic lock refresh option

5 Locker Management

Another feature is the management of the lockers registered in the HPSA, allowing the user to deregister them, to activate or deactivate the automatic refresh.

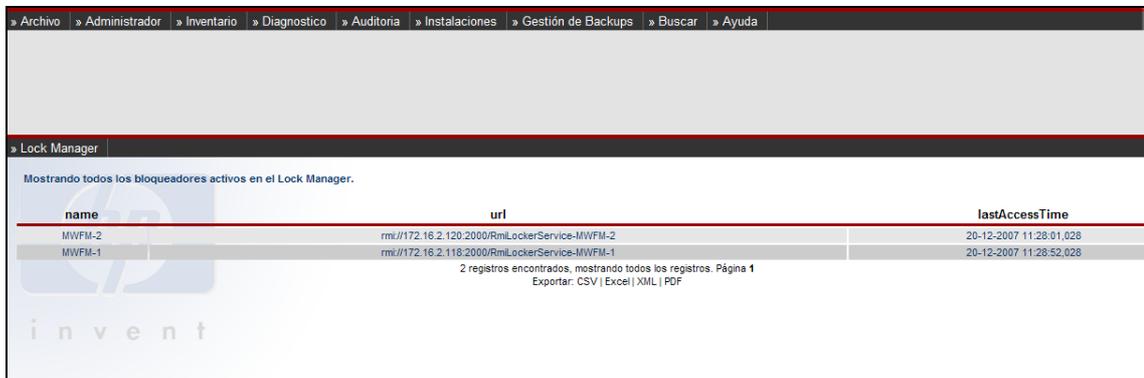
A locker being active implies that the Lock Manager will manage the locking requests from that locker, or, in other words, it will manage the locking requests belonging to the flows that are executed in the machine where that locker resides.

To make a list of all the registered lockers in the HPSA we must select the "Search" (Buscar) ' "Lock Manager" ' "Lockers" (Bloqueadores).



Fig. 8 Lockers Menu

Next we can see in the bottom part of the screen a list with all the registered lockers.



name	url	lastAccessTime
MWFM-2	rmz//172.16.2.120:2000/RmlLockerService-MWFM-2	20-12-2007 11:28:01,028
MWFM-1	rmz//172.16.2.118:2000/RmlLockerService-MWFM-1	20-12-2007 11:28:52,028

2 registros encontrados, mostrando todos los registros. Página 1
Exportar: CSV | Excel | XML | PDF

Fig. 9 Locker list

The information shown about each locker is the following:

- Name: name of the registered locker. The name of the locker must be unique.
- URL: url of the locker.
- LastAccessTime: Date of the last time the locker was accessed.

5.1 Un-registration of the lockers

In order to make an un-registration of a locker we must first select a locker or lockers desired and select the "Lock Manager" ' "Un-register" (Desregistrar) option from the bottom menu.

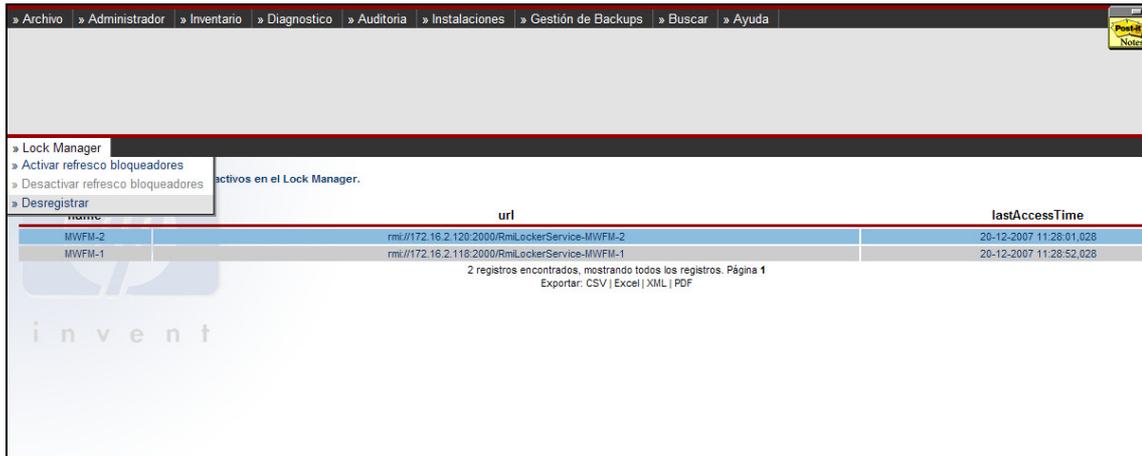


Fig. 10 Un-registering of Lockers

In the example from the image above the locker MWFM-2 has been selected. If we then select the "Un-register" option from the menu, the same screen will appear but with only one locker, MWFM-1.

5.2 Activation of the Locker refresh

In a similar way as what happens with the locks, there exists the possibility of enabling the automatic refresh of the list of registered lockers. To do this, we select the "Lock Manager" ' "Activate the locker refresh" menu option.



Fig. 11 Activating the Locker Refresh

Once this option has been selected, it appears in the bottom part of the screen a new field which allows configuring the frequency with which the list of lockers will be updated.

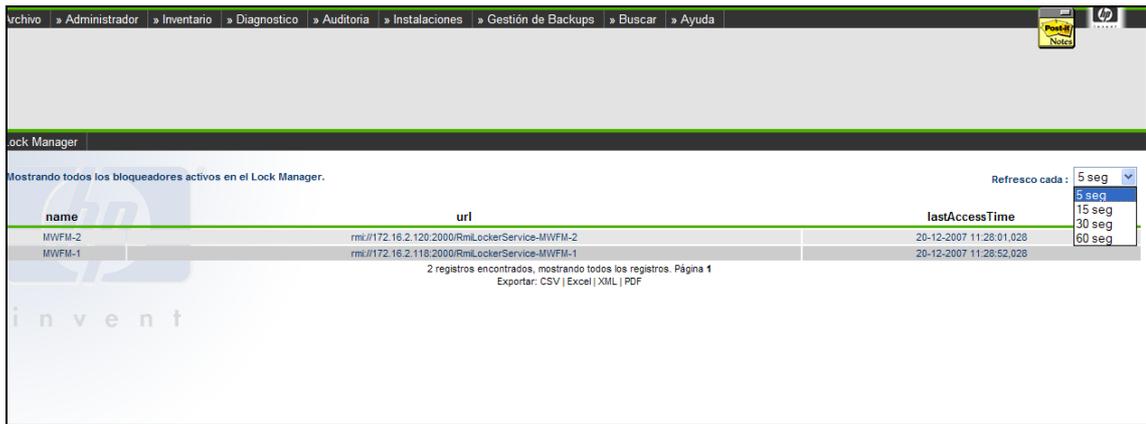


Fig. 12 Locker Refresh frequency selection

5.3 Deactivation of the Locker refresh

The automatic Locker refresh can be disabled at any given moment by using the option from the menu "Lock Manager" -> "Disable locker refresh" (Desactivar refresco bloqueadores). This option will only appear when the automatic refresh is currently active.

To switch on this feature, select the menu option "Lock Manager" -> "Disable locker refresh" (Desactivar refresco bloqueadores).

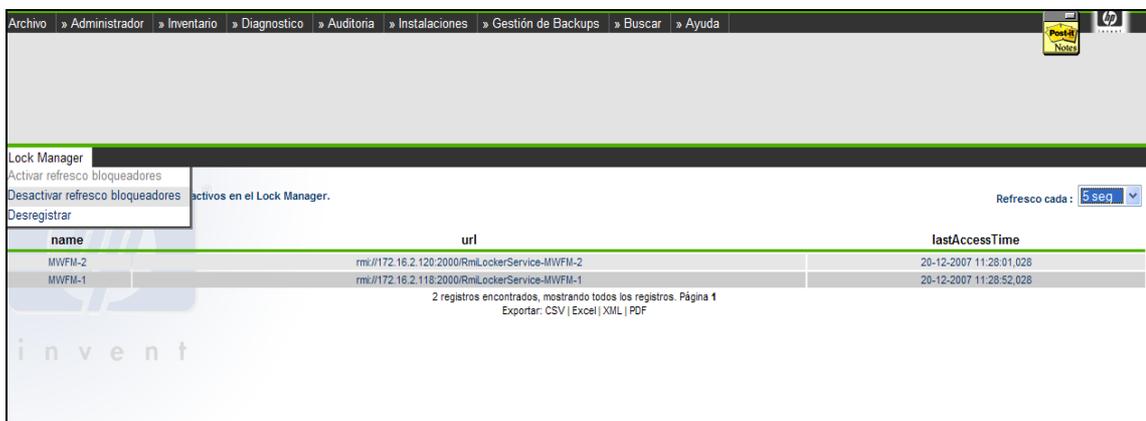


Fig. 13 Deactivation of the Locker Refresh

6 List of Data

If when selecting any of the previously mentioned operations, a list of data appears in the bottom part of the screen similar to the following:

Mostrando todos los bloqueadores activos en el Lock Manager.

name	url	lastAccessTime
MWFM-2	rmi://172.16.2.120:2000/RmiLockerService-MWFM-2	20-12-2007 11:28:01,028
MWFM-1	rmi://172.16.2.118:2000/RmiLockerService-MWFM-1	20-12-2007 11:28:52,028

2 registros encontrados, mostrando todos los registros. Página 1
 Exportar: CSV | Excel | XML | PDF

The data can be ordered using any of the list's fields. In this particular case (name, url, lastAccessTime). To do this, we only have to click with the left mouse button over the field we want to use to order.

In the bottom part of the table a message appears indicating the number of elements listed, and also options for exporting the result to a file in several formats: CSV, Excel, XML or PDF.

Last of all, if the result list contains more than 10 elements it will be paginated, indicating at all times that page we are in. Also we can go to the next or the previous page.

In the following example we select the option of exporting to Excel format:

Search filters: LockId, Locker Name, Status, Creation Time, Last Status Time, Key, Ownerid. [Buscar]

lockId	lockerName	status	creationTime	lastStatus
ed278505ac100277010655dde6dec8	[07027439233, com.hp	STABLISHED	18-12-2007 05:08:18,008	18-12-2007 05:08:18,008
a68c4c61ac100277010655dd2fa1d64f	[AC_V_Antonio, com.hp	REQUESTED	04-12-2007 12:05:20,005	04-12-2007 12:05:20,005
f2ca104aac100277010655dd8c79b21d	[07027439333, com.hp	STABLISHED	19-12-2007 07:23:57,023	19-12-2007 07:23:57,023
a688627bac100277010655dd49f3b45f	[AC_V_Antonio, com.hp	STABLISHED	04-12-2007 12:01:04,001	04-12-2007 12:01:04,001

File Download
 Do you want to open or save this file?
 Name: locks.xls
 Type: Hoja de cálculo de Microsoft Excel, 766 bytes
 From: 172.16.2.121
 [Open] [Save] [Cancel]
 Always ask before opening this type of file
 While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. [What's the risk?](#)

Fig. 14 Exporting result menu

A window appears indicating the name for the file with the exported data, and an option is given of either opening the file or saving it on disk.

7 Configuration

In order to be properly configured the Lock Manager Web needs to know where the Lock Manager service is located, and from what host and port the Lock Manager Web's locker will communicate with the Service.

Configuration for the RMI Lock-Manager

These properties specify the location of the RMI Lock Manager Service, which is the module that implements the Locking.

```
lock.manager.service.ip = 127.0.0.1
```

```
lock.manager.service.port = 1220
```

```
lock.manager.service.name = RmiLockManagerService
```

```
lock.manager.locker.persistence.dir = ${dir.hpsa.var}/tmp/lockers
```

Configuration for the Command Line Locker

This is the locker that will be used to communicate with the Lock Manager Service

```
lock.manager.locker.service.ip = localhost
```

```
lock.manager.locker.service.port = 1230
```

```
lock.manager.locker.service.name = RmiLockerService-SUPERLOCKER_CMD
```

```
lock.manager.locker.name = SUPERLOCKER_CMD
```

Configuration for the Web Administration Locker

This is the locker that the Lock Manager Web will use to communicate with the Lock Manager Service

```
locker.service.host = localhost
```

```
locker.service.port = 1230
```

```
locker.service.name = RmiLockerService-SUPERLOCKER_WEB_1
```

```
locker.name = SUPERLOCKER_WEB_1
```