

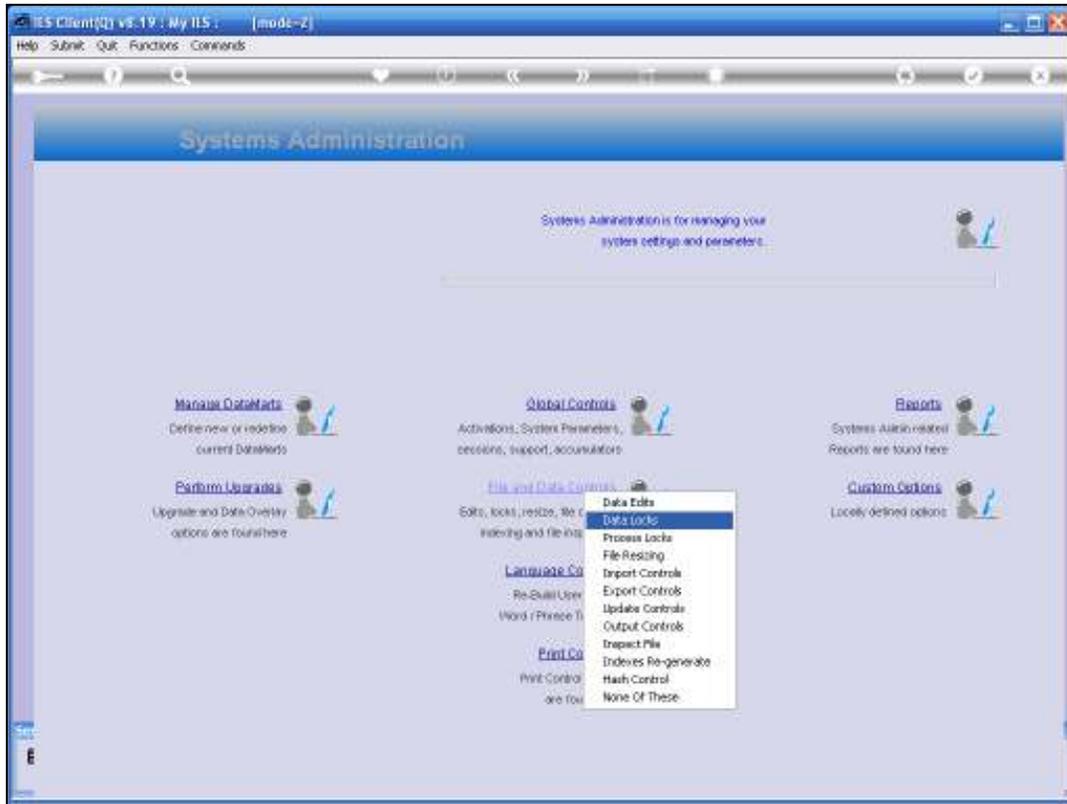


Slide 1

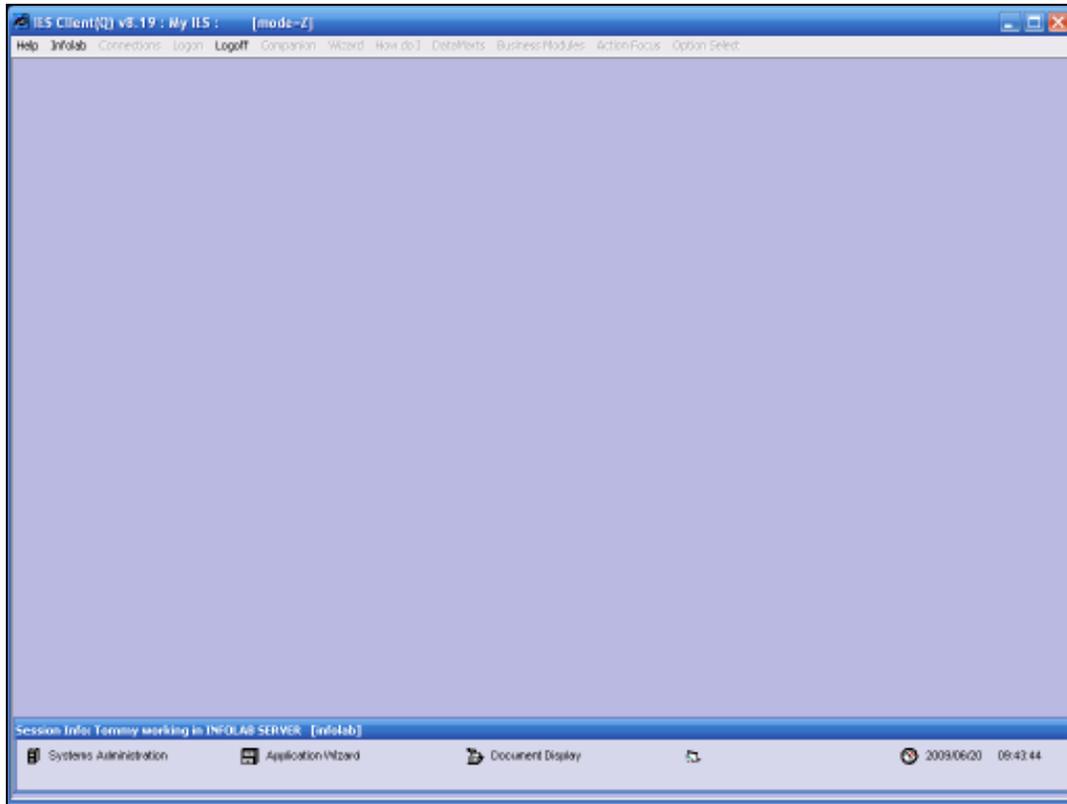
Slide notes: In this tutorial we consider how to manage Data Locks. From the Systems Administration menu, we choose File and Data Controls, and then we select Data Locks.



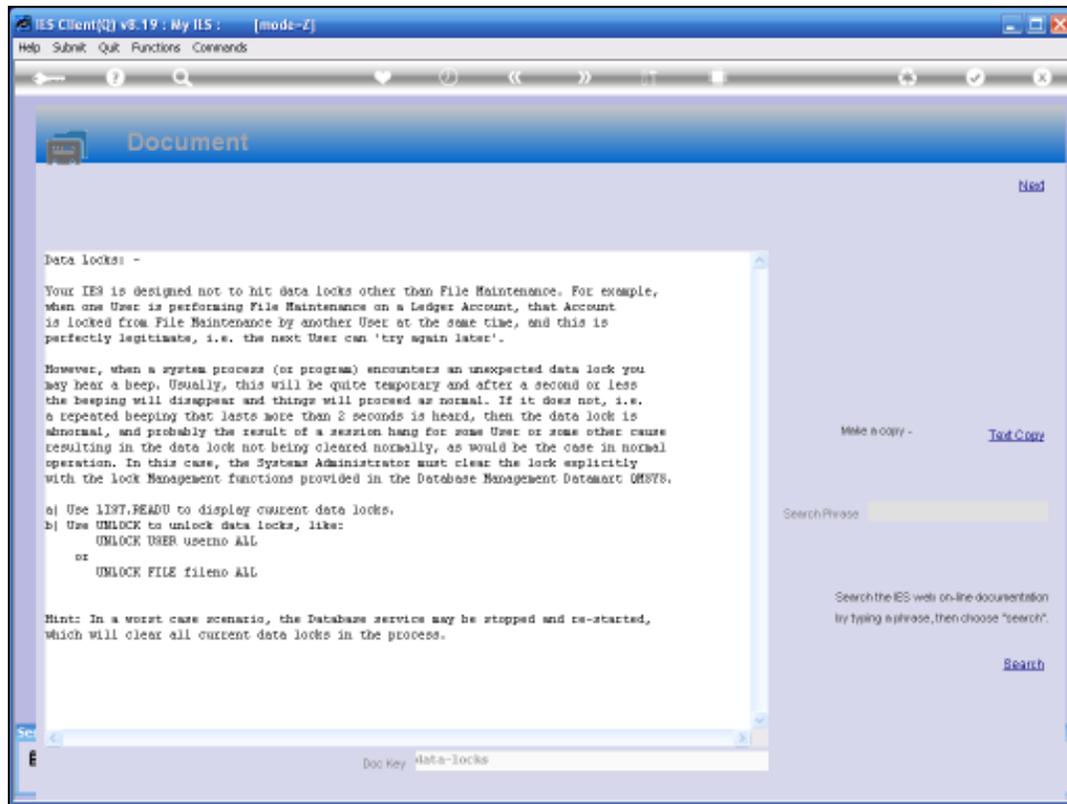
Slide 2
Slide notes:



Slide 3
Slide notes:

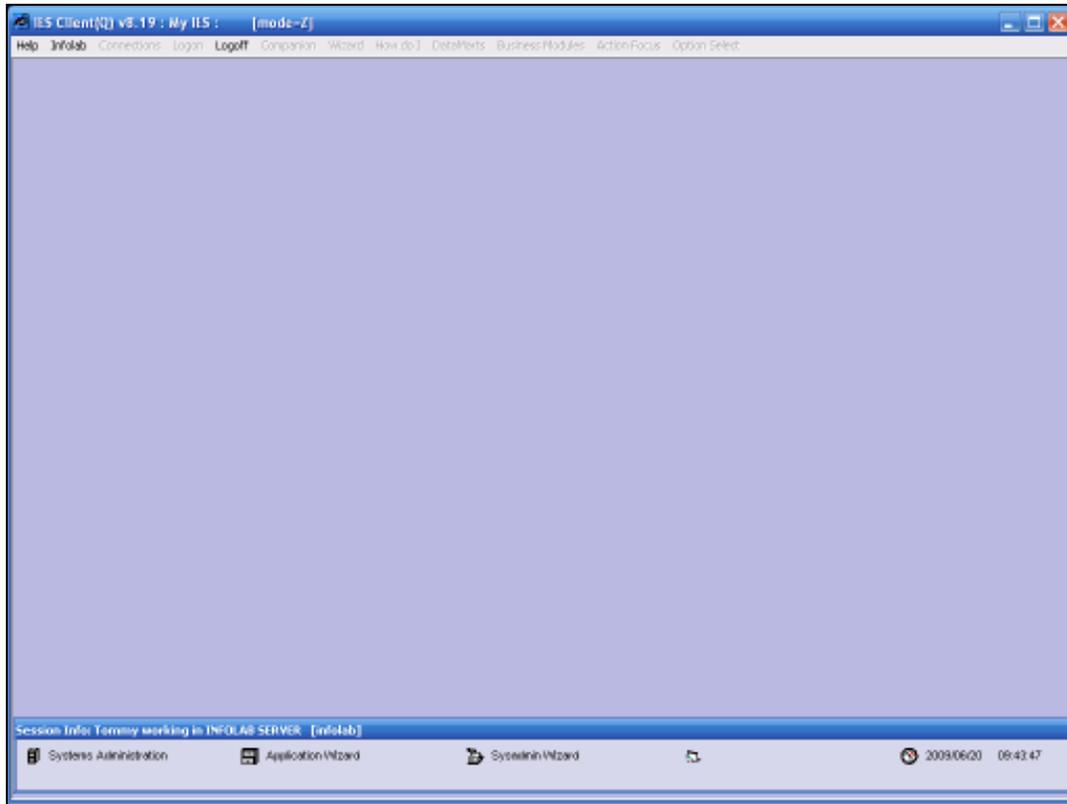


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Slide notes:



Slide 5

Slide notes: Data Locks can potentially be experienced in a Multi User environment where multiple Users try to update the same record at the same time. A Data Lock is legitimate when a 2nd User is prevented from updating a Record in a File Maintenance action while a 1st User is already holding that same record, and the 2nd User should wait or try later. However, the system also updates many multiples of records in various system actions, and when there is an abnormal Session ending or hang, a Data Lock can possibly remain, in some cases, that now prevents normal use of some functions. This is the type of Data Lock that we need to deal with and that we are discussing here. It does not necessarily happen often, but if it does, then what is one supposed to do? That is what the Help here is explaining. If there is no Systems Administrator, then the QM Database Service can be stopped and re-started, which will release all data locks in the process, but in a working multi-User environment we may not want to take such drastic action, and we have other tools to correct the problem.

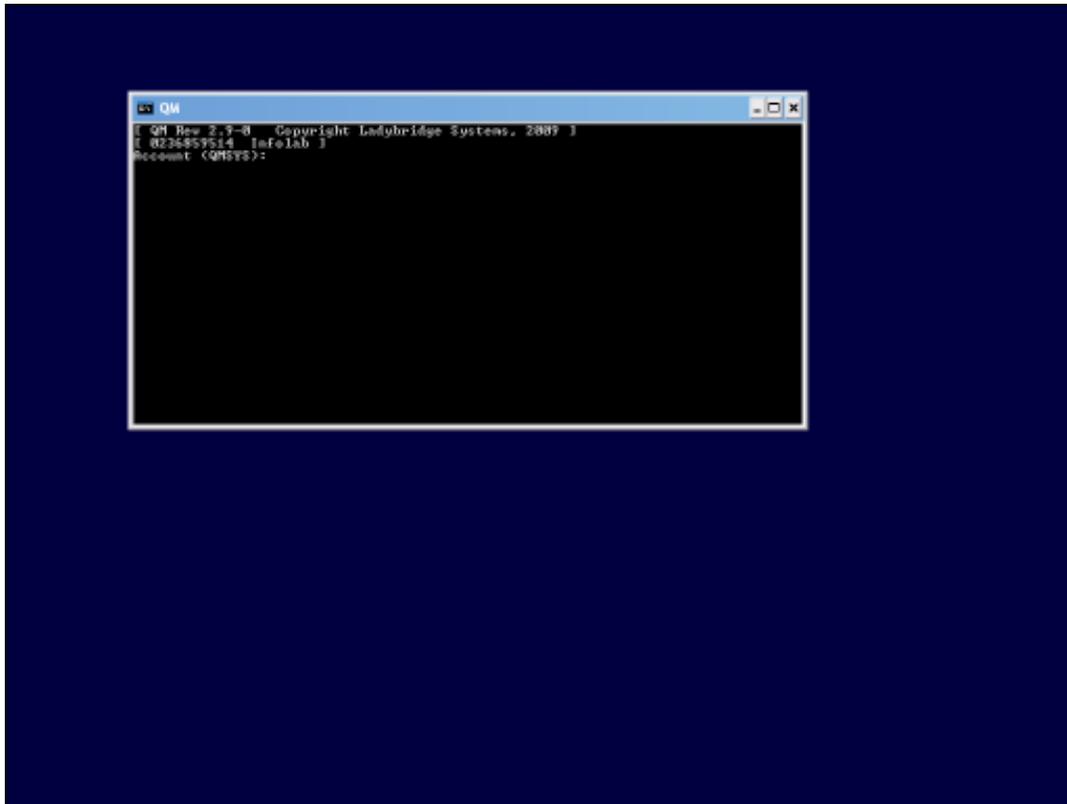


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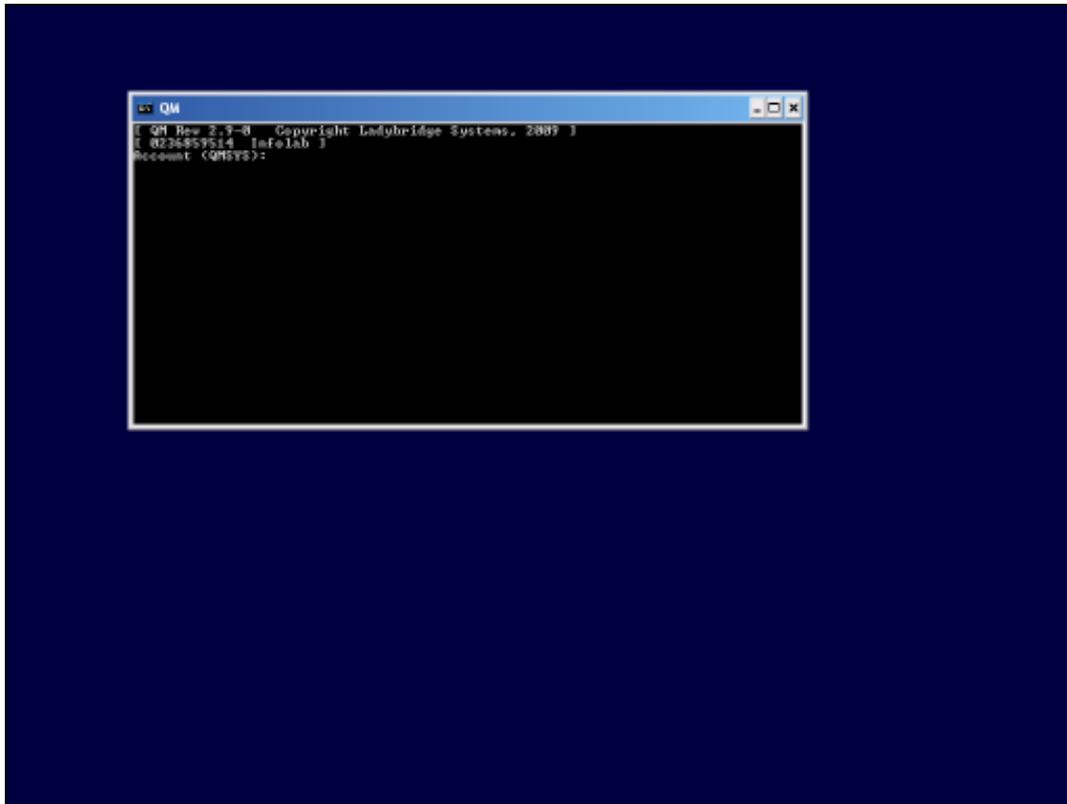
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Slide notes: We can use a Console or Telnet Session to perform the necessary action, and in this example we will use a Console Session.



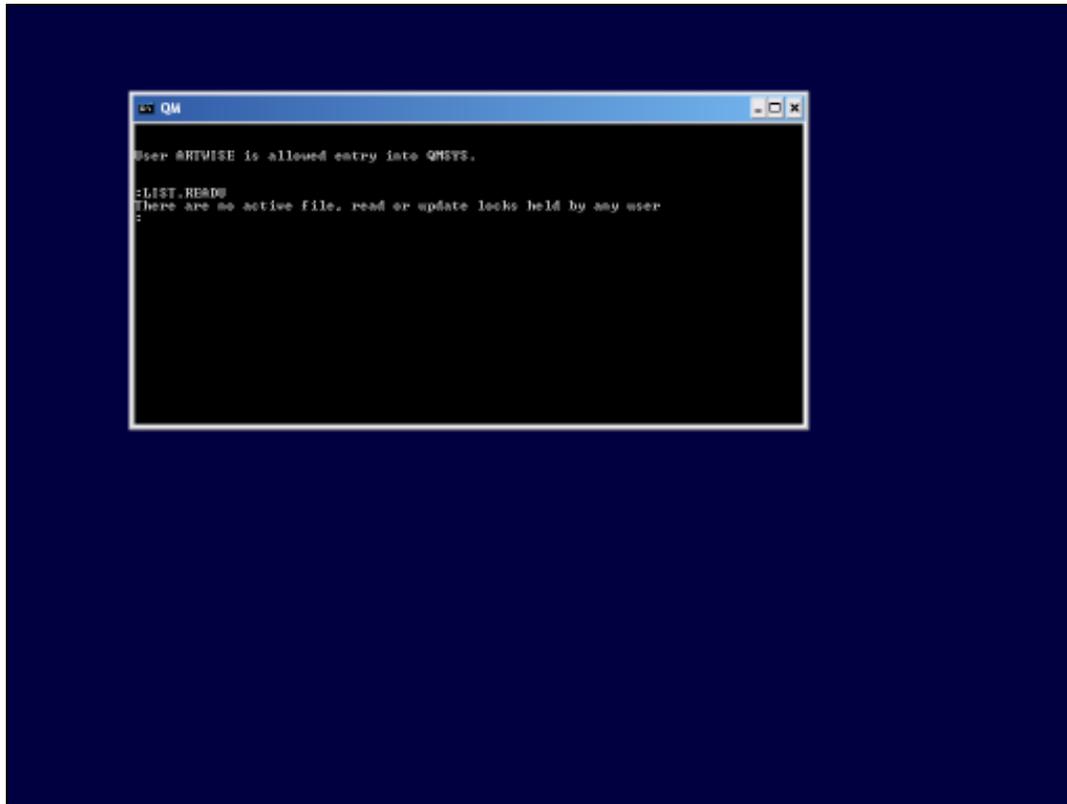
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Slide notes:



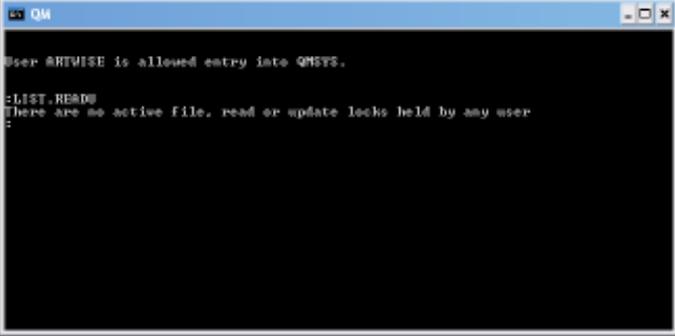
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Slide notes: Data Locks can only be released in the QMSYS Datamart, and by a User with Administrator privileges. When we type the LIST.READU command, then the system will display all current Data Locks.



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Slide notes: In fact, there are no such Locks at the moment.

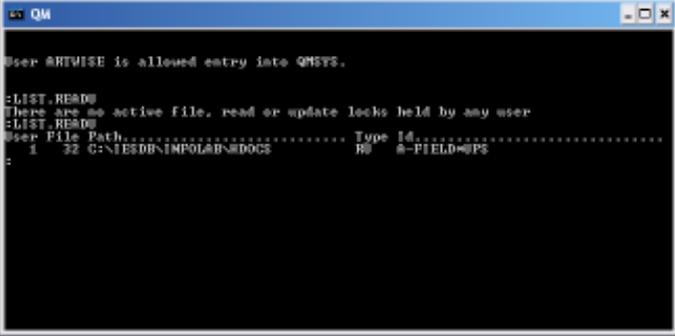


```
QM
User @RTWISE is allowed entry into QMSYS.

=LIST_READ@
There are no active file, read or update locks held by any user
:
```

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Slide notes: So, we have now created some locks, so that we can demonstrate what will happen. We repeat the Command again.

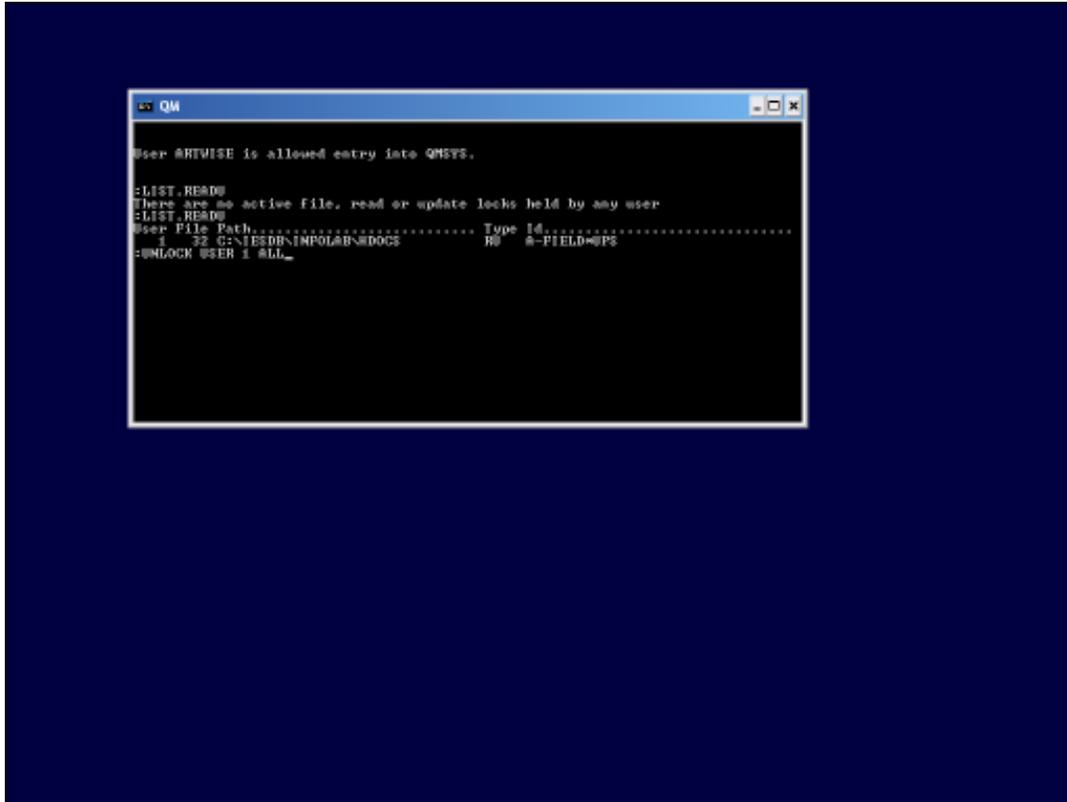


```
QM
User @RTWISE is allowed entry into QMSYS.

:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
User File Path..... Type Id.....
 1 32 C:\ESDB\INFOLAB\HDOCS R@ 8-FIELD@PS
```

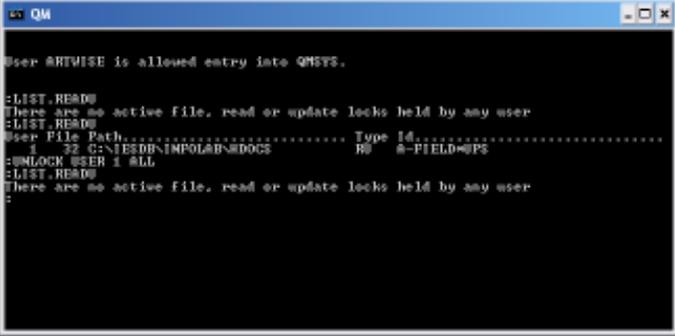
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Slide notes: And now we see a Data Lock on file HDOCS in the INFOLAB Datamart. We can clear data locks by User or by File number. In the 1st example, we will do it by User number, and this command will unlock all data locks kept by the stated User Number.



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Slide notes:

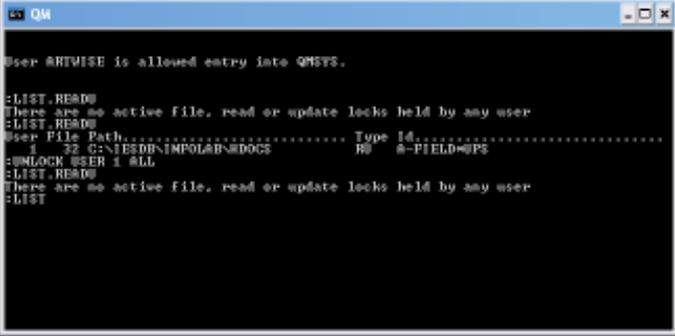


```
QM
User @RTWISE is allowed entry into QMSYS.

:LIST_READS
There are no active file, read or update locks held by any user
:LIST_READS
User File Path..... Type Id.....
  1  32 C:\IESDB\IMPOLAB\IDOC5      R0  8-FIELD=OPS
:UNLOCK USER 1 *ALL
:LIST_READS
There are no active file, read or update locks held by any user
:
```

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Slide notes: There are now no Data Locks listed, and it is clear that the UNLOCK command has worked properly.

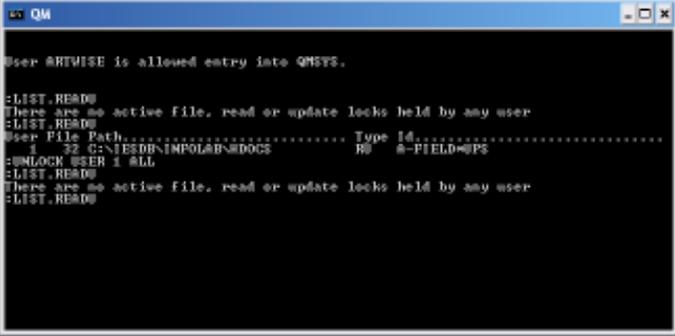


```
QM
User @RTWISE is allowed entry into QMSYS.

:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
User File Path..... Type Id.....
  1 32 C:\IESDB\IMPOLAB\SDOCS R@ 8-FIELD@MS
:UNLOCK_USER 1 @LL
:LIST_READ@
There are no active file, read or update locks held by any user
:LIST
```

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Slide notes: We have created a Lock again, to demonstrate further.

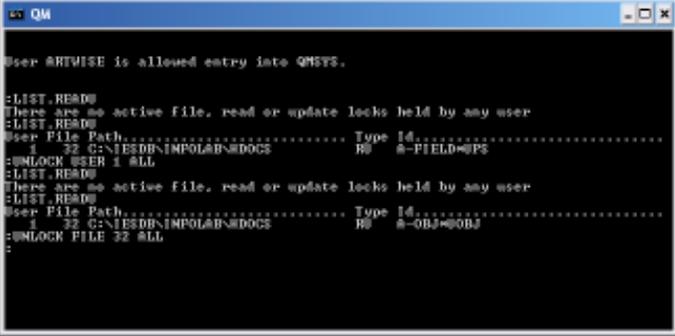


```
QM
User @RTWISE is allowed entry into QMSYS.

:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
User File Path..... Type Id.....
  1 32 C:\IESDB\IMPOLAB\DOCS R@ 8-FIELD@GPS
:UNLOCK USER 1 @LL
:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
```

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Slide notes: So here we have a data lock again, for the same User and File, but a different Record Key this time. And this time we unlock by using the File Number.

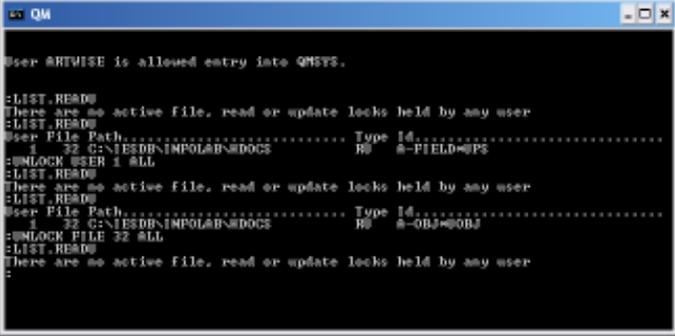


```
QM
User @RTWIS is allowed entry into QMSYS.

:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
user File Path..... Type Id.....
  1 32 C:\IESDB\IMPOLAB\DOCS          R@  @-FIELD@@PS
:UNLOCK USER 1 @LL
:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
user File Path..... Type Id.....
  1 32 C:\IESDB\IMPOLAB\DOCS          R@  @-OBJ@@OBJ
:UNLOCK FILE 32 @LL
:
```

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Slide notes:



```
QM
User @RTWISE is allowed entry into QMSYS.

:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
user File Path..... Type Id.....
  1  32 C:\ESDB\IMPOLAB\B\DOCS          R@  @-FIELD@@PS
:UNLOCK @SER 1 @LL
:LIST_READ@
There are no active file, read or update locks held by any user
:LIST_READ@
user File Path..... Type Id.....
  1  32 C:\ESDB\IMPOLAB\B\DOCS          R@  @-OBJ@@OBJ
:UNLOCK FILE 32 @LL
:LIST_READ@
There are no active file, read or update locks held by any user
:
```

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Slide notes: Once again, as we can see, the UNLOCK command has done its work. So this is how a Systems Administrator can perform unlocking of Data Locks that are no longer valid.