

Migration of Your ClearQuest User Database in 7 Steps

Introduction

ClearQuest continues to be a dominant player in the defect tracking system tool for many SPK and Associates customers. One of the more common administrative tasks we are asked to perform is a user database migration. This document describes steps required to migrate user data from one ClearQuest database to another.

The focus is on the use of the Export/Import tools. This is the preferred method when the goal is to populate a modified schema in a new location or consolidating exiting user databases

If the desire is to simply clone or relocate an existing ClearQuest database, you would use the *Move* function in the ClearQuest Maintenance tool and ClearQuest Designer to migrate the data.

Environment Scenario

You have created a new ClearQuest user database using the ClearQuest Designer tool. It is essentially an empty shell. We will call this new database TARGET_USERDB.

You also have an existing ClearQuest installation with a potentially different schema and different user database. We will call the existing user database SOURCE_USERDB.

Step 1 – Target Schema Preparation

Ensure that destination ClearQuest schema has taken into account any existing change request data from the source database. You need to make sure the right data types are created and assigned for all of the data you import.

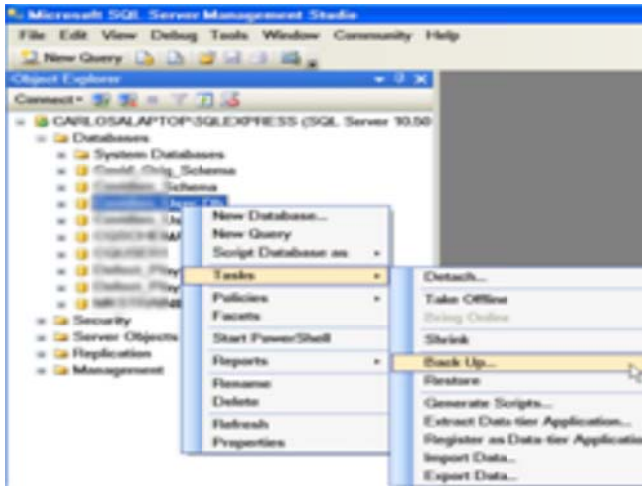
You will also want to create two new fields in the destination ClearQuest schema to capture legacy ID and State information.

- Old_ID
- Oldstate

Step 2 – Backup New User Database

This is an optional step. If you have already populated your TARGET_USERDB with some correct data that you wish to retain, you should back it up.

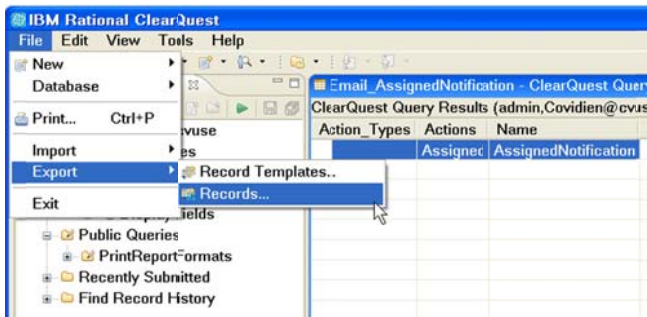
- Launch the MS SQL Management Studio.
- Select the User Database TARGET_USERDB
- Right click **Task** -> **Tools**-> **Back Up**



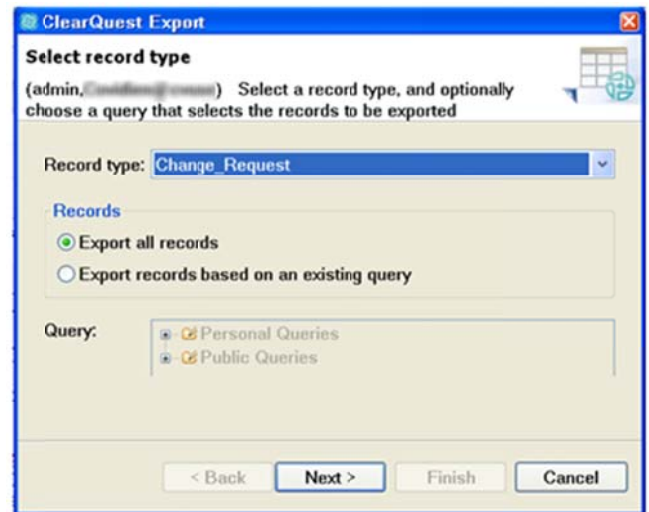
- Set for Full back up. Pick a location for the output database file and **click OK**.

Step 3 – Export User Data Database

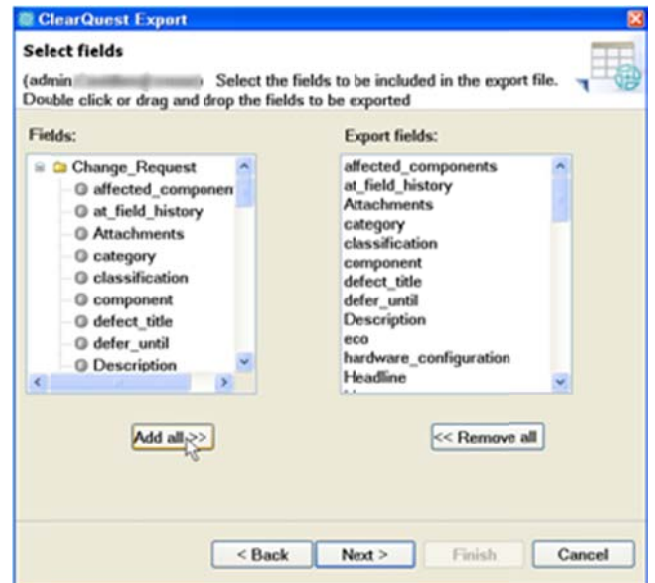
- Pick a date & time for the export of the existing source user database. Notify your users to complete their transactions by that milestone. Typically I would select an over-the-weekend or holiday migration period.
- Bring up ClearQuest Client as Admin.
- Connect to the SOURCE_USERDB.
- From menu bar click **File ->Export->Records**



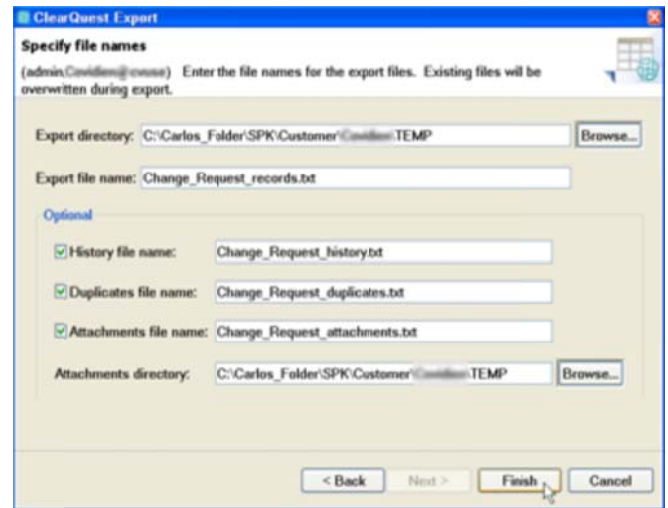
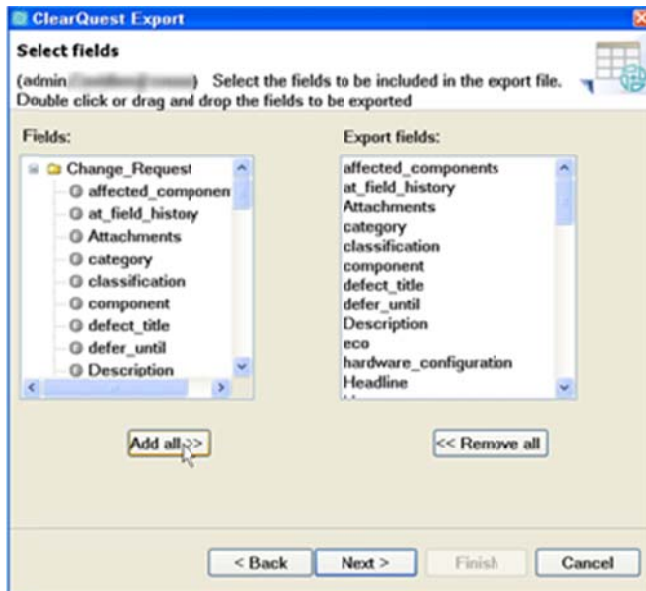
- After the pop-up appears, **select Record Type: Change Request & Export All Records** and then **Click Next**. *note – your version of ClearQuest may this defined as *defect*.



- Select **Add All** to add all the fields to the Export Fields box and then **Click Next**.



- After the next dialog box appears, **select Add All** to add all the fields to the Export Fields box and then **Click Next**.

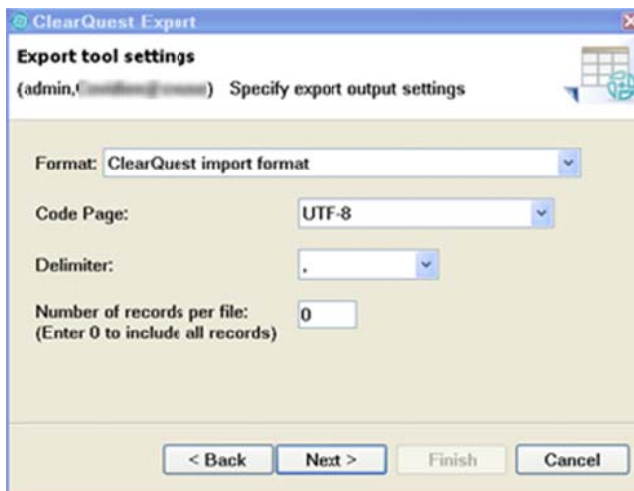


You now have four CSV text files representing the defect data in the original User Data Base.

- After the next dialog box appears, keep the defaults (Format, Code Page, Delimiter, and 0 – to include all records) and **Click Next**.

Repeat Step 3 for as needed for additional fields such as:

- Reference Records (RAPProject)
- Customer



Step 4 – Create Reference .txt files

- Repeat Step 3 again (export) this time replacing the source database (*SOURCE_USERDB*) with the target (*TARGET_USERDB*). Place the result .txt files in a different location. You will use this data as reference information.

- When done, exit out of ClearQuest Client.

- Use the **Browse** button to set where you want your data to go (.txt Files), and again for where you want the attachments to be copied and **Click Finish**.

Step 5 – Cleaning and preparing the files for import

You now have four CSV .txt files representing the old User DB data, and four CSV txt files representing the new User DB (which is mostly empty). As the target ClearQuest Schema database has changed (new states, Fields, etc), you need to create a third batch of .txt CSV files

which are aligned. Once done, you'll use them for the import.

My preferred method is to start with the Change_Request_Records.txt files.

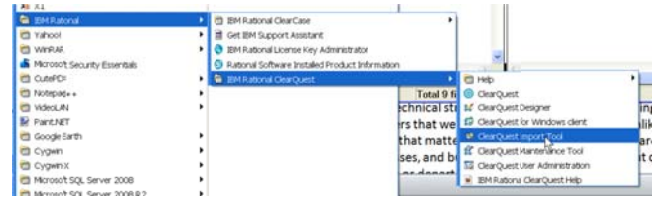
- Open the Old - (SOURCE_USERDB) exported Change_Request_Records.txt
 - Open the New - (TARGET_USERDB) exported Change_Request_Records.txt.
- Use the new version as the master for the header row. Clean up your data. i.e. for each CR to be imported, make sure all the records are accurate to the new schema (valid state, valid fields). The format for the data is:


```
"dbid","id","Description" etc
```
 - Do the same for the Change_Requests_history.txt (If you want the history)
 - Do the same for the Change_Requests_duplicates.txt (If you have existing duplicates to import)
 - Do the same for the Change_Requests_attachments.txt

When you have finished scrubbing your data, you are ready for importation.

Step 6 – Importing your data into the new user database

- Bring up ClearQuest Import Tool
Start -> All Programs -> IBM Rational -> IBM Rational ClearQuest -> ClearQuest Import Tool



- Select the target schema repository in next pop up dialog.
- Next, when the import login dialog comes up, login to the tool:

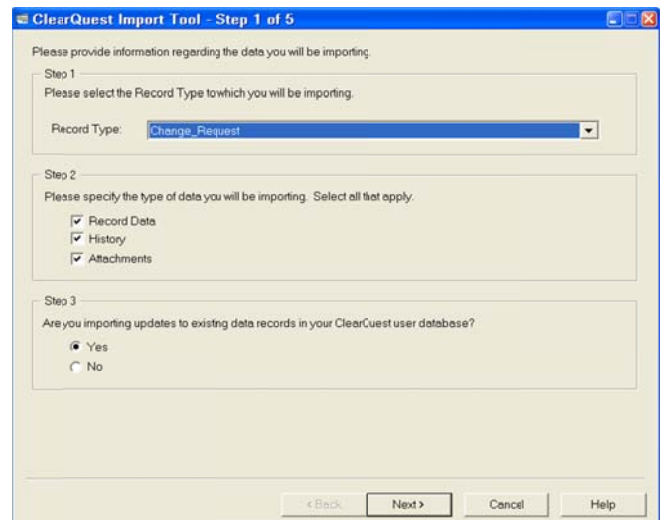
Login: [Account with Admin Privileges]

Password: [Password]

Database: [Your Target User Production DB] – TARGET_USERDB

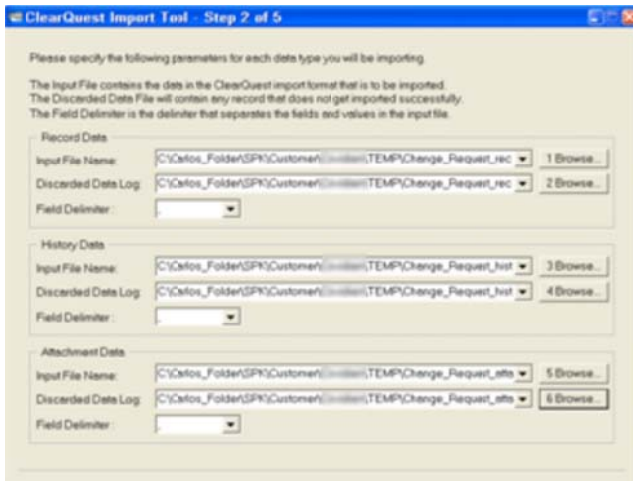
- Select Record Type as **Change_Request** . Select the type of data you wish to import (all three boxes). And Click **Yes** to override exiting data. Then **Click Next**.

*** If you have Reference Records (RAPProject), do it before Change_Request (aka defect) ***



- Select Input files, the Discarded Files (which holds failed imports), the delimiter (,) for the

Record, History, and Attachment fields.
Then **Click Next**



Please specify the following parameters for each data type you will be importing

The Input File contains the data in the ClearQuest import format that is to be imported.
The Discarded Data File will contain any record that does not get imported successfully.
The Field Delimiter is the delimiter that separates the fields and values in the input file.

Record Data

Input File Name: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_rec 1 Browse...

Discarded Data Log: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_rec 2 Browse...

Field Delimiter: [Dropdown]

History Data

Input File Name: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_hist 3 Browse...

Discarded Data Log: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_hist 4 Browse...

Field Delimiter: [Dropdown]

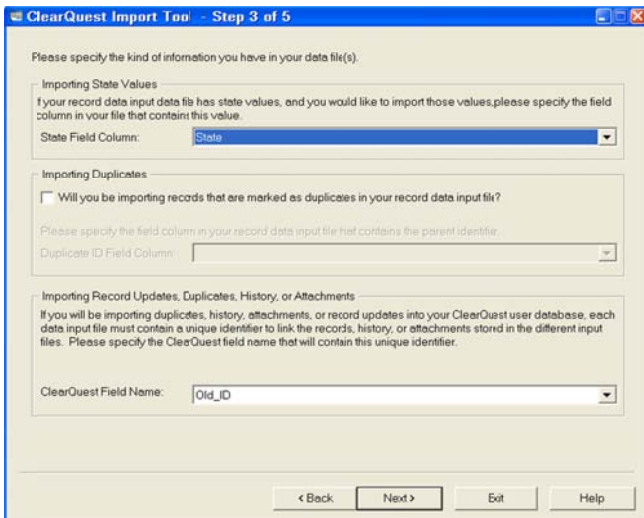
Attachment Data

Input File Name: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_attn 5 Browse...

Discarded Data Log: C:\cfos_folder\SPK\Customer\1000001\TEMP\Change_Request_attn 6 Browse...

Field Delimiter: [Dropdown]

- For the next dialog popup, leave defaults of State Field Column as "State" and ClearQuest Field Name as "Id". Leave Importing Duplicates as unclicked. Select Old_ID as your ClearQuest Field Name and **Click Next**



Please specify the kind of information you have in your data file(s).

Importing State Values

If your record data input data file has state values, and you would like to import those values, please specify the field column in your file that contains this value.

State Field Column: State

Importing Duplicates

Will you be importing records that are marked as duplicates in your record data input file?

Please specify the field column in your record data input file that contains the parent identifier.

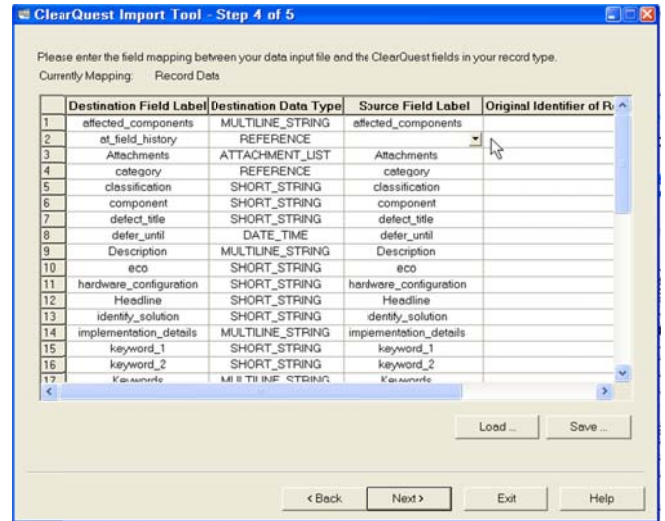
Duplicate ID Field Column: [Dropdown]

Importing Record Updates, Duplicates, History, or Attachments

If you will be importing duplicates, history, attachments, or record updates into your ClearQuest user database, each data input file must contain a unique identifier to link the records, history, or attachments stored in the different input files. Please specify the ClearQuest field name that will contain this unique identifier.

ClearQuest Field Name: Old_ID

- The next window will show all the field mappings for the Change Record Data. First remove the at_field_history from the source.



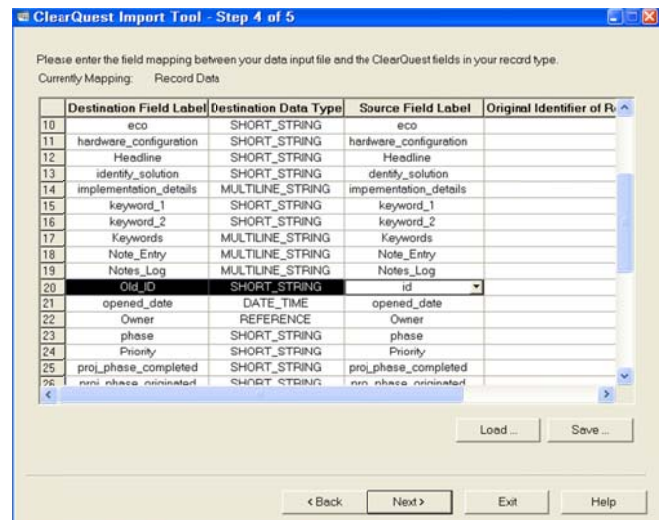
Please enter the field mapping between your data input file and the ClearQuest fields in your record type.

Currently Mapping: Record Data

	Destination Field Label	Destination Data Type	Source Field Label	Original Identifier of R
1	affected_components	MULTILINE_STRING	affected_components	
2	at_field_history	REFERENCE		
3	Attachments	ATTACHMENT_LIST	Attachments	
4	category	REFERENCE	category	
5	classification	SHORT_STRING	classification	
6	component	SHORT_STRING	component	
7	defect_title	SHORT_STRING	defect_title	
8	defer_until	DATE_TIME	defer_until	
9	Description	MULTILINE_STRING	Description	
10	eco	SHORT_STRING	eco	
11	hardware_configuration	SHORT_STRING	hardware_configuration	
12	Headline	SHORT_STRING	Headline	
13	identity_solution	SHORT_STRING	identity_solution	
14	implementation_details	MULTILINE_STRING	implementation_details	
15	keyword_1	SHORT_STRING	keyword_1	
16	keyword_2	SHORT_STRING	keyword_2	
17	Keywords	MULTILINE_STRING	Keywords	
18	Note_Entry	MULTILINE_STRING	Note_Entry	
19	Notes_Log	MULTILINE_STRING	Notes_Log	
20	Old_ID	SHORT_STRING	id	
21	opened_date	DATE_TIME	opened_date	
22	Owner	REFERENCE	Owner	
23	phase	SHORT_STRING	phase	
24	Priority	SHORT_STRING	Priority	
25	proj_phase_completed	SHORT_STRING	proj_phase_completed	
26	proj_phase_terminated	SHORT_STRING	proj_phase_terminated	

Buttons: Load..., Save..., < Back, Next >, Exit, Help

- Then scroll down and assign Source ID to Destination **Old_ID**. Then **click Next**



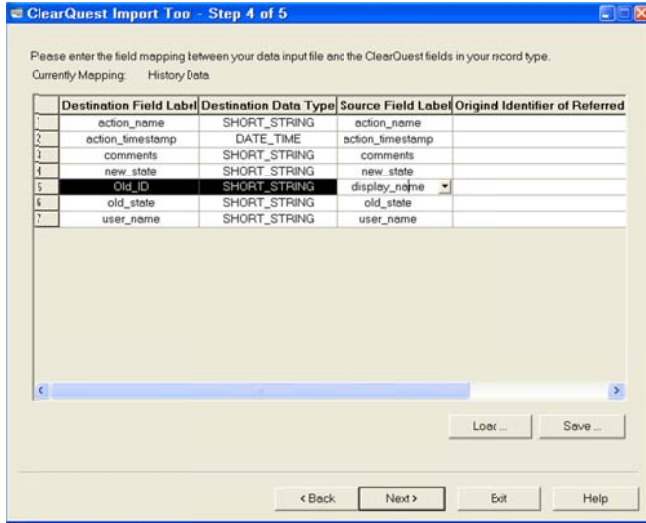
Please enter the field mapping between your data input file and the ClearQuest fields in your record type.

Currently Mapping: Record Data

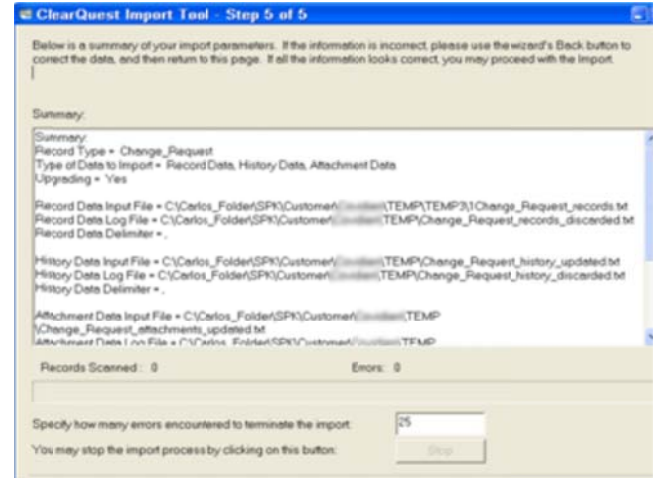
	Destination Field Label	Destination Data Type	Source Field Label	Original Identifier of R
10	eco	SHORT_STRING	eco	
11	hardware_configuration	SHORT_STRING	hardware_configuration	
12	Headline	SHORT_STRING	Headline	
13	identity_solution	SHORT_STRING	identity_solution	
14	implementation_details	MULTILINE_STRING	implementation_details	
15	keyword_1	SHORT_STRING	keyword_1	
16	keyword_2	SHORT_STRING	keyword_2	
17	Keywords	MULTILINE_STRING	Keywords	
18	Note_Entry	MULTILINE_STRING	Note_Entry	
19	Notes_Log	MULTILINE_STRING	Notes_Log	
20	Old_ID	SHORT_STRING	id	
21	opened_date	DATE_TIME	opened_date	
22	Owner	REFERENCE	Owner	
23	phase	SHORT_STRING	phase	
24	Priority	SHORT_STRING	Priority	
25	proj_phase_completed	SHORT_STRING	proj_phase_completed	
26	proj_phase_terminated	SHORT_STRING	proj_phase_terminated	

Buttons: Load..., Save..., < Back, Next >, Exit, Help

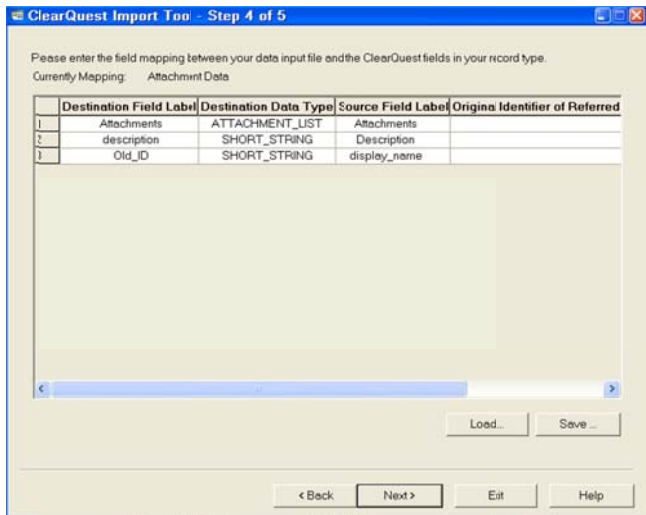
- For History data. Map **display_name** in Source to **Old_ID** in Destination Field



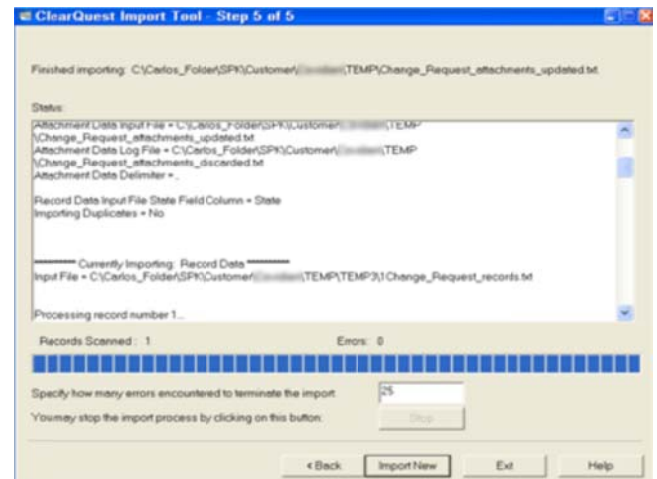
- Now you're ready to run the import. Click **Import**



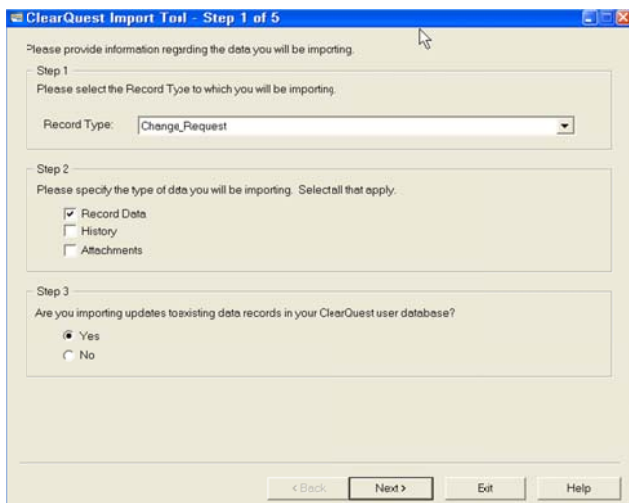
- For Attachment data. Map **display_name** in Source to **Old_ID** Destination field again
Click Next



- You should see a progress bar. Once done you can review errors by scrolling the window. Failures should be corrected and rerun from the discard file. Don't re-input a successful record or you will get duplications.



- Next you will input the duplicates. If you don't have duplicates in your database, skip ahead to Step 7. Click **Import New** on the prior dialog box. Or bring up the import tool again.
- Select **Change_Request** for Record Type, Click **Record Data** and click **Yes** to import records to existing database.



ClearQuest Import Tool - Step 1 of 5

Please provide information regarding the data you will be importing.

Step 1
Please select the Record Type to which you will be importing.

Record Type:

Step 2
Please specify the type of data you will be importing. Select all that apply.

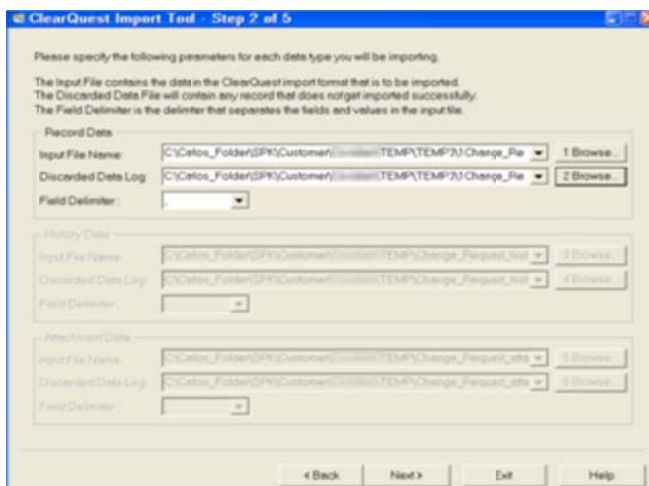
Record Data
 History
 Attachments

Step 3
Are you importing updates to existing data records in your ClearQuest user database?

Yes
 No

< Back Next > Exit Help

- Browse to select your Change_Request_duplicates.txt file. Browse to create a Change_Request_duplicates_discard.txt file. Click **Next**



ClearQuest Import Tool - Step 2 of 5

Please specify the following parameters for each data type you will be importing.

The Input File contains the data in the ClearQuest import format that is to be imported.
The Discarded Data File will contain any record that does not get imported successfully.
The Field Delimiter is the delimiter that separates the fields and values in the input file.

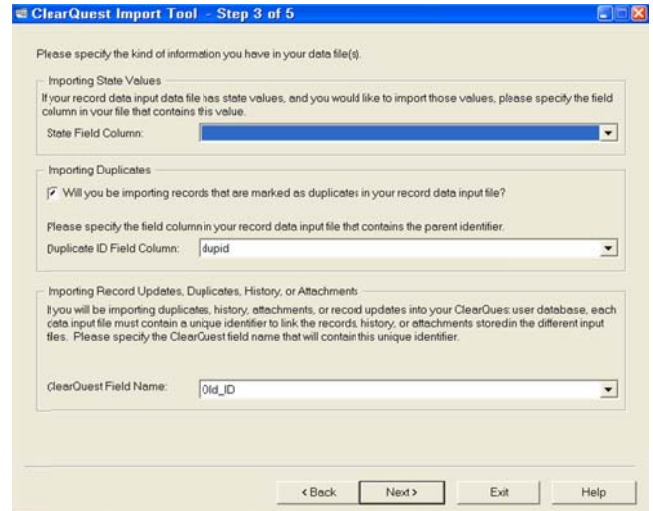
Record Data
Input File Name: C:\Cefos_Folder\SPK\Customer\...TEMP\TEMP7\Change_File 1 Browse...
Discarded Data Log: C:\Cefos_Folder\SPK\Customer\...TEMP\TEMP7\Change_File 2 Browse...
Field Delimiter: [Dropdown]

History Data
Input File Name: C:\Cefos_Folder\SPK\Customer\...TEMP\Change_Request_hist 3 Browse...
Discarded Data Log: C:\Cefos_Folder\SPK\Customer\...TEMP\Change_Request_hist 4 Browse...
Field Delimiter: [Dropdown]

Attachment Data
Input File Name: C:\Cefos_Folder\SPK\Customer\...TEMP\Change_Request_att 5 Browse...
Discarded Data Log: C:\Cefos_Folder\SPK\Customer\...TEMP\Change_Request_att 6 Browse...
Field Delimiter: [Dropdown]

< Back Next > Exit Help

- For the next dialog box, leave the State Field Column Blank. Click the box on **Importing Duplicates** and select **dupid** for the duplicate ID Field Column. Set the ClearQuest Field name as **Old_ID**. Click **Next**



ClearQuest Import Tool - Step 3 of 5

Please specify the kind of information you have in your data file(s).

Importing State Values
If your record data input data file has state values, and you would like to import those values, please specify the field column in your file that contains this value.
State Field Column: [Dropdown]

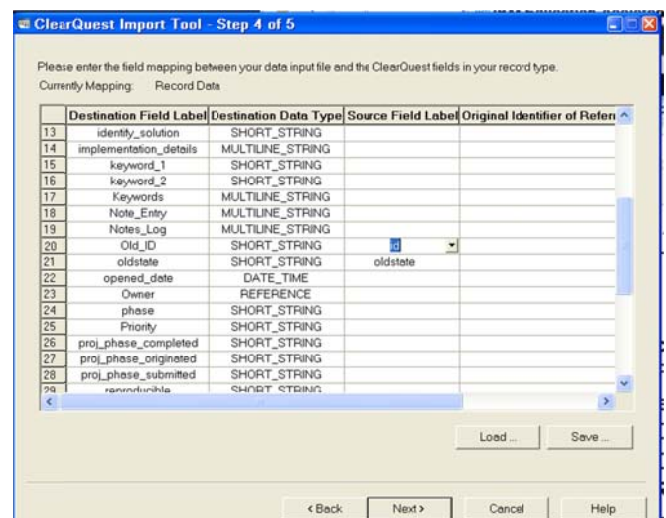
Importing Duplicates
 Will you be importing records that are marked as duplicates in your record data input file?
Please specify the field column in your record data input file that contains the parent identifier.
Duplicate ID Field Column:

Importing Record Updates, Duplicates, History, or Attachments
If you will be importing duplicates, history, attachments, or record updates into your ClearQuest user database, each data input file must contain a unique identifier to link the records, history, or attachments stored in the different input files. Please specify the ClearQuest field name that will contain this unique identifier.
ClearQuest Field Name:

< Back Next > Exit Help

If you get a pop up asking for the optional State information – **click No**

- For the next dialog box **Click Next**. Map source field **ID** to destination field **Old_ID**. Map source field **oldstate** to destination field **oldstate**. **Click Next**



ClearQuest Import Tool - Step 4 of 5

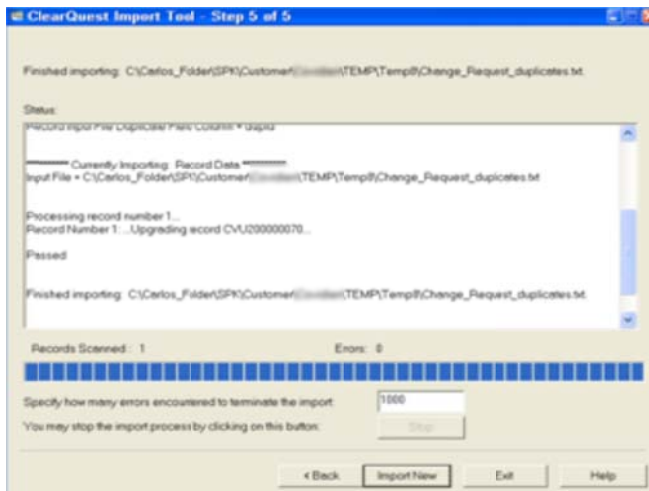
Please enter the field mapping between your data input file and the ClearQuest fields in your record type.
Currently Mapping: Record Data

	Destination Field Label	Destination Data Type	Source Field Label	Original Identifier of Refer
13	identity_solution	SHORT_STRING		
14	implementation_details	MULTILINE_STRING		
15	keyword_1	SHORT_STRING		
16	keyword_2	SHORT_STRING		
17	Keywords	MULTILINE_STRING		
18	Note_Entry	MULTILINE_STRING		
19	Notes_Log	MULTILINE_STRING		
20	Old_ID	SHORT_STRING	<input type="text" value="ID"/>	
21	oldstate	SHORT_STRING	<input type="text" value="oldstate"/>	
22	opened_date	DATE_TIME		
23	Owner	REFERENCE		
24	phase	SHORT_STRING		
25	Priority	SHORT_STRING		
26	proj_phase_completed	SHORT_STRING		
27	proj_phase_originated	SHORT_STRING		
28	proj_phase_submitted	SHORT_STRING		
29	referentials	SHORT_STRING		

Load ... Save ...

< Back Next > Cancel Help

- Run the import for the duplicates. **Click Import**



- You should see a progress bar complete. You can review errors by scrolling the window. Failures should be corrected and rerun.

Step 7 – Testing Your New User Database

- Launch the ClearQuest client and exam the data. Are all the records there? Are they in the correct state? They will have a new ID [UserDB]XXXXXXXX, which is ClearQuest requirement when importing data. You can create a query to view the Old_ID field which will map back to the original DB.
- Minor problems should be corrected in place. More serious issues would merit a restore of the user database created in Step 2.

- After cut-over you may wish to keep the old ClearQuest User Database around. An easy way to accomplish this is to detach the DB inside MS SQL. This removes the instance but leaves intact the database, with its data files and transaction log files.

Link to Instructions are here:

<http://technet.microsoft.com/en-us/library/ms191491.aspx>

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