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*SPK and Associates* 900 E Hamilton Ave, Ste.100 Campbell, CA 95008

# **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



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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 overthe-weekend or holiday migration period.
- Bring up ClearQuest Client as Admin.
- Connect to the SOURCE\_USERDB.
- From menu bar click File ->Export->Records

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 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*.

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ClearQuest	Export	
Select record admin, shoose a query	type ) Select a record type, and optionally that selects the records to be exported	,
Record type:	Change_Request	×
Records		
Export al	I records	
O Export re	cords based on an existing query	
Query:	e @Personal Queries e @Public Queries	
	< Back Next > Finish	Cancel

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

elds:	Export fields: affected_components a_field_history
at_field_history     Attachments     category	Attachments category classification
classification     component     defect_title	defect_title defer_until Description
O deter_unbl     O Description	hardware_configuration Headline
Add all	<< Remove all

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



Fields:	Export fields:
Change_Request Change_Request Category	affected_components at_field_history Attachments category classification component defect_title defect_until Description eco hardware_configuration Headline
Addiallass	CC Remue all

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

Code Page: Delimiter: Number of record	s per file:	UTF-8	<b>v</b>	~	

 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. www.spkaa.com

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dmin.Covidience counte) Ente verwritten during export.	r the file names for the export files. Existing files will be	
Export directory: C:\Carlos_I	Folder/SPK/Customer/Condine TEMP	Browse
Expert file name: Change_Re	iquest_records.txt	
Optional		
History file name:	Change_Request_history.bt	
Duplicates file name:	Change_Request_duplicates.txt	
Attachments file name:	Change_Request_attachments.txt	
Attachments directory:	C:\Carlos_Folder\SPK\Customer TEMP	Browse
	<back next=""> Finish N</back>	Cancel

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

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

- Reference Records (RAProject)
- 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.

# 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

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- 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 (RAProject), do it before Change\_Request (aka defect) \*\*\*

ClearQuest In	nport Tool - Step 1	of 5			
lease provide info	rmation regarding the date	a you will be importing	1.		
Steo 1			·		
Please select the	Record Type towhich yo	u will be importing.			
Record Type:	Change_Request				•
Step 2					
Please specify th	e type of data you will be i	mporting. Select all t	lat apply.		
F Record	Data				
<ul> <li>History</li> </ul>					
Attachm	ents				
Step 3					
Are you importing	updates to existing data r	ecords in your ClearC	uest user databas	se?	
· Yes					
C No					
		< Back	Next>	Cancel	Help
					. resp

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



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

ease specty the toro	wing parameters for each data type you will be importing	
he Input File contains t he Discarded Data Fil he Field Delimiter is th	he deb in the ClearQuest importionnal that is to be imported. a will contain any necord that does not get imported successfully. a deliniter that separates the fields and values in the input file.	
Record Data		
input File Name	C1Cafes_Folder/SPN1Customen TEMPIChange_Requert_rec .	1 Browse
Discarded Data Log	C'/Cefes_Folder/SPR)Customer/ TEMP/Change_Request_rec •	2 Browse.
Field Delimiter:		
History Data		
input File Name:	C1Calos_Folder/SPK1Customer/TEMP1Change_Request_hist	3Browse.
Discarded Data Log	C\Cslos_Folder\SPK\Customer\ TEMP\Change_Request_hist	4 Browse
Field Delimiter :		
AttachmentData		
input File Name:	C1Catos_Folder/SPRiCustomer/TEMP\Change_Requeit_atta .	S Drowse.
Discerded Date Log	C\Catos_Folder\SPR\Customer\ TEMP\Change_Request_atts •	6 Browse.
and the second se		

	Destination Field Label	<b>Destination Data Type</b>	Source Field Label	Original Identifier of Ro
1	affected_components	MULTILINE_STRING	affected_components	
2	at_field_history	REFERENCE		N
3	Attachments	ATTACHMENT_LIST	Attachments	13
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	identify_solution	SHORT_STRING	dentify_solution	
14	implementation_details	MULTILINE_STRING	impementation_details	
15	keyword_1	SHORT_STRING	keyword_1	
16	keyword_2	SHORT_STRING	keyword_2	
17	1 Kassuninte	MUTINE STRING	Kassummle	1.
- C				>

 Then scroll down and assign Source ID to Destination Old\_ID. Then click Next

	<b>Destination Field Label</b>	<b>Destination Data Type</b>	Source Field Label	Original Identifier of R	
10	eco	SHORT_STRING	eco		1
11	hardware_configuration	SHORT_STRING	hardware_configuration		
12	Headline	SHORT_STRING	Headline		
13	identify_solution	SHORT_STRING	dentify_solution		2
14	implementation_details	MULTILINE_STRING	impementation_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		1
20	Old_ID	SHORT_STRING	id	1	
21	opened_date	DATE_TIME	opened_date	1	
22	Owner	REFERENCE	Owner		
23	phase	SHORT_STRING	phase		
24	Priority	SHORT_STRING	Priority		
25	proj_phase_completed	SHORT_STRING	proj_phase_completed		
26	nmi nhaco originatod	SHORT STRING	nro nhace originated	1	
<				>	

 For History data. Map display\_name in Source to Old\_ID in Destination Field

 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** 

	tib has state values, and you would like to import those values plea	se specify the field
column in your file that conta	in this value.	
State Field Column:	State	•
Importing Duplicates		
Will you be importing re	cods that are marked as duplicates in your record data input file?	
	unn in your record data input the nat contains the parent identifier.	
		-
Importing Record Lindates	Funlicates History of Attachments	
If you will be importing dual	capilicates, history, attachments, or record updates into your ClearQuest u	er database each
data input file must contain	a inique identifier to link the records, history, or attachments stored in	the different input
files. Please specify the Cl	eaQuest 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.



- 2	Destination Field Labe	Destination Data Type	Source Field Labe	Original Identifi	ier of Referre
	action_name	SHORT_STRING	action_name		
	action_timestamp	DATE_TIME	action_timestamp		
	comments	SHORT_STRING	comments		
0	new_state	SHORT_STRING	new_state		
312	Old_ID	SHORT_STRING	display_name		
	old_state	SHORT_STRING	old_state		
-					
	user_name	SHORT_STRING	user_name		
	user_name	SHORT_STRING	user_name		
	user_name	SHORT_STRING	user_name		3

 For Attachment data. Map display\_name in Source to Old\_ID Destination field again Click Next

	Incention Libio raph	Destination Data Type	Source Field Label	Ungina	Identifier	of Referre
1	Attachments	ATTACHMENT_LIST	Attachments			
5	description	SHORT_STRING	Description			
1	Old_ID	SHORT_STRING	display_name			
¢						

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

Below is a summary of your impot parameters. If if correct the data, and then return to this page. If all t	he information is he information loo	ncorrect, please us sks correct, you may	the wizerd's Back button to proceed with the Import.
Summary: Summary: Record Type + Change_Request Type of Data to Import + Record Data, History Da Upgrading + Ves	la, Attachment Di	efa	
Record Data Input File - C1Carlos, Folder/SPNCA Record Data Log File - C1Carlos, Folder/SPNCA Record Data Delimiter - , History Data Input File - C1Carlos, Folder/SPNCA History Data Ingl File - C1Carlos, Folder/SPNCA	ustomen stomen stomen	(TEMP\TEMP3)10 TEMP(Charge_Re (TEMP(Charge_Re TEMP(Charge_Re	angs_Request_records.txt quest_records_discarded.txt quest_history_updated.txt quest_history_discarded.txt
************************************	Customen	TEMP	
Records Scenned: 0	Errors	. 0	
Specify how many errors encountered to terminate	the import	8	

 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.

ClearQuest Import Tool - St	ep 5 of 5	
Finished importing: ClyCerlos_Folder/SP	NCustomer/ TEMP/Change_Request_aft	schments_updated bit.
Stetus		
Attachment Data Input Hie = CV_Datos_F VCherge_Request_attachments_update Attachment Data Log File = CVCarlos_Fo VCherge_Request_attachments_dscard Attachment Data Delimiter =_	older(SPR)(Lustomer) (TEMP d M slder(SPR)(Lustomer) (TEMP fed M	
Record Data Input File State Field Colum Importing Duplicates + No	vn = State	
Currently Importing: Record Da Input File - C1/Carlos_Folder/SPI0/Custor	ta	cords.txt
Processing record number 1		
Records Scenned : 1	Errors: 0	
Specify how many errors encountered to	terminate the import	
Youmay stop the import process by click	ing on this button	
	«Back ImportNew	Ext Help



- 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.

Record Type:	Change_Request
Step 2	
Please specify th	e type of data you will be importing. Selectall that apply.
Record I	Data
History	
Attachme	ents
Step 3	
Are you importing	updates to existing data records in your ClearQuest user database?
Yes	
C No	

Browse to select your

Change\_Request\_duplicates.txt file. Browse to create a

Change\_Request\_duplicates\_discard.txt file. Click Next

The Input File contains the Discarded Data Fil	the data in the ClearQuest import format t le will contain any record that does not gr	het is to be imported. et imported successfully.	
The Field Delimiter is th	e delimter that separates the fields and	volues in the input Sie.	
Record Data Input File Name	C1Cetos_Folder/SPR\Customer	TEMP\TEMP3J/Change_Re	1 Browse .
Discarded Data Log	C1Celos_Folder(SPR)/Customer/	TEMP\TEMP3UCharge_Re	2 Browse
Field Delimiter :			
	C1Celos, Folder/SPN:Deltoner/Titl	International Percentage +	J Bowse,
	C1Celos_Folder/SF51Customer/2001	IIIII/TEMP/Chaops_Perpirit_htt +	(TRANSIC)
	-		
	Colleton, Parkers DPOLYMONEN (Com	TDMFVDange_Perpett_afts +	Silver.
	Charles, Falder/SPAtterner/Chin	TEMP/(hange_Pequat_sta w	6 Drowler.
	· ·		

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 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

your record data input data		
column in your file that contai	I file has state values, and you would like to import those v ins this value.	values, please specify the field
State Field Column:		•
Importing Duplicates		
F Will you be importing re-	cords that are marked as duplicates in your record data i	nput file?
Please energity the field coll	umpin your record data input file that contains the parent	dectifier
Prease specily the field Column:	dunid	uenmer.
populate to Frend Constitut.	Jaabia	
Importing Record Updates	Dualicates, History, or Attachments	
Ivou will be importing dupli	icates, history, attachments, or record updates into your C	learQues: user database, eac
the second s	the state of the second stress	to strength of a different land
cata input file must contain a	a unque identifier to link the records, history, or attachmen	its stored in the different input
cata input file must contain of files. Please specify the Cle	a unque identifier to link the records, history, or attachmen earCuest field name that will contain this unique identifier.	its stored in the different input
cata input file must contain of fles. Please specity the Cle	a unque identitier to link the records, history, or attachmen earQuest field name that will contain this unique identifier.	is stored in the different input
ceta input file must contain a files. Please specify the Cla ClearQuest Field Name:	a unque identitier to link the records, history, or attachmer earOuest field name that will contain this unique identifier.	ns storedin the different input
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ceta input file must contain e tles. Please specity the Cle clearQuest Field Name:	a unque idemner to inix the records, history, or effective eerQuest field name that will contain this unique identifier.	ns storedin me dinerent input

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

	<b>Destination Field Label</b>	Destination Data Type	Source Field Lab	pel	Original Identit	lier of Refe	n ^
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	id	*			
21	oldstate	SHORT_STRING	oldstate				
22	opened_date	DATE_TIME					
23	Owner	REFERENCE					-11
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 <	1 renroducible	SHIGTS TRING				)	
					Load	Smup	



- Run the import for the duplicates. Click Import

PROVE PROFILE CONTRACTOR PROFILE	V DECKI	
Currently Importing Record Date		
Input File = C1/Carlos_Folder(SPI1/Custom	er (TEMP\Temp8)Change_Request_dupic	oties.txt
Processing record number 1 Record Number 1:Upgrading ecord CV	A.(200000070	
-11100		
Finished importing: C1Carlos Filder/SPI	Customer TEMP/Temp/IChance Recue	et duelicates M
Finished importing: C1/Carlos_Filder(SPI	Customer (TEMP\Temp?)Change_Requir	st_duplicates.54
Finished importing: C1/Cerlos_Pilder/SPI	Customer (TEMP\Temp®)Change_Reque	st_shiplicates.54
Prished importing: C1/Carlos_Filder/SP Records Scanned : 1	Customer TEMP(Temp8(Change_Peque	st_duplicates.txt
Phished importing: C1/Carlos_Filder(SP Records Scanned : 1	Costoner TEMP\Temp®Change_Requi	r_duplicates M
Prished importing: C1Cerlox_Pilder(SP	Customer TEMP\Temp®Change_Peque Enos: 0	n_duplemes M

 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]XXXXXXX, 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.

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 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/enus/library/ms191491.aspx

> Carlos Almeida SPK and Associates Architect, Software Engineering