

# Star Accounting Solutions Pty Ltd

## Star Projects (6.40.3) / Clientele (7.3a) Interface

### Technical Manual

**Table of Contents**

<b>Introduction</b>	<b>3</b>
<b>Prerequisites</b>	<b>3</b>
<b>Access vs. SQLServer</b>	<b>3</b>
<b>Star Projects Linked Tables</b>	<b>4</b>
<b>Module Move</b>	<b>5</b>
<b>Upsize Access to SQLServer</b>	<b>6</b>
<b>Clientele/PA Link Tables</b>	<b>7</b>
<b>Clientele Database Triggers</b>	<b>10</b>
<b>Updating the Databases</b>	<b>10</b>
<b>Clientele System Options</b>	<b>10</b>
<b>Web TimeRecorder Integration</b>	<b>12</b>
<b>New Clientele Forms</b>	<b>13</b>

## Introduction

The Interface between Clientele and Star Projects allows users to create Star Projects objects based on Clientele objects. Associations are also made between Clientele objects and existing Star Projects objects. These associations are created and maintained with Clientele.

There are 6 associations between the 2 packages

- Clientele Organisations and Star Projects Clients
- Clientele Quotes, Service Agreement & Opportunities and Star Projects Projects
- Clientele Calls and Star Projects Tasks
- Clientele Part types and Star Projects transaction Types
- Clientele Quote Lines and Star Projects Budgets
- Clientele Call events and Web TimeRecorder

## Prerequisites

These install instructions should be carried out by a Trained Clientele expert and assume a certain level of knowledge.

- Clientele 7.3a and the Development Tools have been installed.
- Star Projects version 6.40.3 is installed.
- Star Projects Interface has never been installed.
- The user has access to the directory containing the CTEL.MDB.
  - You can find the location of the CTEL.MDB by looking at the properties of the Clientele shortcut off the Start / Programs menu.
- An ODBC connection has been created pointing to the server where the Star Projects database is located.
  - You need to create this connection on every machine that has an Clientele Local install.
- Open the CTEL.MDB and ensure that 'Show System Objects' is set to On in Access.
  - You can check this on the View Tab of the Tools/Options screen from within MS Access.

## Access vs. SQLServer

The interface can only be installed on a SQL Server database.

- Upsizing to SQLServer
  - Perform all the Steps in this document
- Access Database, do not perform the following Steps:
  - Copy the CTEL.MDB and rename it to CTEL.SYS

## Star Projects Linked Tables

Before linking the tables, you need to run the script 'eFO73a\_SP6403\_prelink.sql' against the Clientele database. It creates some views that are used by the integration. Before running it, you will have to replace the database names of your Clientele and Star Projects databases.

- Open the CTEL.MDB in MS Access  
Select File + Get External Data + Link Tables.
- The tables listed below must be linked to the CTEL.MDB via the ODBC connection created to the Star Projects SQL database. To link the tables, do the following:
- On the Link screen, change Files Of Type:  
**From** Microsoft Access      **To** ODBC Databases.
- Select the ODBC connection you established in the Pre-requisites, most likely from the Machine Data Source Tab.
- Enter the Login details to SQLServer
  - **Note:** Select (Tick) the check box to 'Save password' on the Link Tables dialog window when linking tables.
  - If you forgot to save the password you can delete the link table from the CTEL.MDB and then re-link.
- Click the options button and check that the database is the PA database.
- Select the tables listed in the following table.

Table Name	Description	
PAActvty	Activity master file	
PABdgCod	Budget code master file	
PABdgDet	Budget Transaction records	
PABdgTrx	Project Budget records	
PABdgTyp	Project Budget type master file	
PAClient	Client master file	
PACompny	Company master file	
PADept	Department master file	
PADiscTP_vw	Discount Types master file	
PANoChrg	No Charge list file	
PANumber	List of all next available system numbers	
PAPrd	Periods master file	
PAPrjSts	Project Status master file	
PAProject	Project master file	
PAResrce	Resource master file	
PA Sectn	Section master file	
PAStaff	Staff master file	
PATask	Task master file	
PATaskWBS	WBS codes for Tasks master file	
PATrx	Invoice Header records	
PATrxDet	Transaction records	
PATrxTyp	Transaction Type master file	
SYSColumns	System column table from PA database	
SYSIndexes	System index table from PA database.	
SYSObjects	System objects table from PA database	
SYSYSSET	Star Projects System Settings	
TRWSXDet	TimeRecorder transaction line records	(if using Web TR)
TRWSXHdr	TimeRecorder header records	(if using Web TR)
PATaskForEFO_vw	List of Tasks with Project/Client details	(EFO Database)
PAPhaseForEFO_vw	List of Phases with Project/Client details	(EFO Database)

During the linking process you will be prompted to select Key Fields.

- for PADiscTp\_vw, select discount\_type
  - for PAPhaseForEFO\_vw, select phase\_id
  - for PATaskForEFO\_vw, select task\_id
- After the links have been created you will need to rename the linked tables. MS Access will give each linked table a prefix of 'dbo\_'. Either remove the prefix dbo\_ manually or run the macro 'Rename\_dboTables'.

## Module Move

- Copy the Star Projects Interface file ("eFO73a\_SP6403\_WithForms.mdb" or "eFO73a\_SP6403\_WithoutForms.mdb") into the Modules directory in the Clientele Server directory.
- Run Module Mover (located in the Clientele Program Group) and use the Developer login.
- You may be prompted to select the directory to install, choose the directory containing the CTEL.MDB.
  - On the Select Module(s) to Install screen to select the modules you wish to install.
    - If you copied the Interface file into the modules directory, the module will automatically be selected (checked).
    - You should uncheck all other modules.
- Typical vs. Advanced Install
- If Module: eFO73a\_SP6403\_WithoutForms.mdb, use the Typical install.
    - A "Typical" install will analyse your current settings and the validation report will notify you with the results.
    - You will be warned if items are to be replaced and a fatal error will occur for items that cannot be installed.
  - If Module: eFO73a\_SP6403\_WithForms.mdb, used the Advanced install.
    - An "Advanced" install requires the user to manually tick each item for installation.
    - The following standard Clientele forms have been included in this module with the Star Projects buttons and code already modified
      - CALL
      - CALLEVENT
      - GENINFOO
      - OPPORTUNITY DETAIL
      - QUOTE MAIN
      - SERVICE
    - If these forms have previously been modified, it is advised that you do not include them when performing the Module Move.
      - A "Typical" install may not stop your current modifications from being replaced. If an item exists you will be prompted for replacement once the installation process is started.
      - The Clientele forms listed in Standard Forms, must be modified to add a link to the new Star Projects Interface forms.
- When prompted to select the database, choose the directory containing the CTEL.MDB, **not** the ODBC connection to the CTEL.MDB.

## Standard Forms

The following Clientele Forms require design alterations to facilitate integration between Star Projects & Clientele. Add the required controls if you used the eFO73a\_SP6403\_WithoutForms.mdb or didn't include the standard forms with the eFO73a\_SP6403\_WithForms.mdb.

Clientele Form	Control	Caption	Control On Push event code	
GenInfoO – Organization Information	btnPAProject	Projects	OpenForm “PAClientProjectDetail”	
OpportunityDetail – Opportunity Detail	btnPAProject	Projects	OpenForm “PAProjectDetail”	
Service – Service Agreement	btnPAProject	Projects	OpenForm “PAProjectDetail”	
Call – Call Detail	btnPAProject	Projects	OpenForm “PACallProjectDetail”	
Call – Call Detail	btnTimeRecorder	TimeRecorder	Global gEvent_ID gEvent_ID = dsCallEvents.Event_ID OpenForm “PATRDetails”	(if using Web TR)
CallEvent – Event Detail	btnPAProject	Projects	OpenForm “PACallProjectDetail”	
CallEvent – Event Detail	btnTimeRecorder	TimeRecorder	Global gEvent_ID gEvent_ID = CurrentRecord.Event_ID OpenForm “PATRDetails”	(if using Web TR)
QuoteMain – Quote Detail	btnPAProject	Projects	OpenForm “PAProjectDetail”	

## Upsize Access to SQLServer

- If your Access database is to be upsized to SQL
  - Upsize your Access database to SQL using the Clientele SQLServer Administration Guide as reference.
  - Do not include the linked tables to the PA database
- If your Access database has already been upsized to SQL
  - Upsize the 6 PA tables that has been created in the CTEL.MDB during the Module Move (Refer Clientele/PA Link Tables):
    - i. PAClientLink
    - ii. PACreateBudget
    - iii. PACreateBudgetLine
    - iv. PACreateProject
    - v. PACreateTRHdr (if using Web TR)
    - vi. PAProdTranTypes
    - vii. PAProjectLink
    - viii. PATaskLink
- If not upsizing Access to SQL
  - You still need to upsize the following 3 PA tables:
    - i. PACreateBudget
    - ii. PACreateBudgetLine
    - iii. PACreateProject
    - iv. PACreateTRHdr (if using Web TR)

## Clientele/PA Link Tables

The following new tables are added to the CTEL.MDB database during the Module Move.

<b>Table Name</b>	PACLIENTLINK	
<b>Description</b>	Clientele Organisation link record to a Star Projects Client	
	<b>Field Name</b>	<b>Data Type</b>
	PAClientDetails_ID (Key Field)	Text
	Per_ID	Text
	Group_ID	Text
	Org_ID	Text
	AddDate	Date/Time
	AddUser	Text
	ChangeDate	Date/Time
	ChangeUser	Text
	ClientCode	Text
	AccountManager	Text
	DefaultProject	Text
	AddressType	Text
	CompanyCode	Text
	Status	Text
	RSChangeDate	Date/Time
	RSArriveDate	Date/Time
	RSSite_ID	Text

<b>Table Name</b>	PACREATEBUDGET	
<b>Description</b>	Clientele table used for creation of Budgets	
	<b>Field Name</b>	<b>Data Type</b>
	Record_identifier (Key Field)	Text
	Inserted_result	Integer
	BudgetId	Integer
	BudgetCode	Text
	ClientCode	Text
	ProjectCode	Text
	Username	Text
	MSPProjectFileName	Text
	BudgetType	Text
	BudgetReference	Text
	ClientReference	Text
	ResourceCode	Text
	Description	Text
	PrimaryResourcePlanningBudget	Integer
	BudgetLockedFlag	Integer
	MSPProjectFileType	Text

<b>Table Name</b>	PACREATEBUDGETLINE
<b>Description</b>	Clientele table used for creation of Budget Lines
<b>Field Name</b>	<b>Data Type</b>
Record_identifier (Key Field)	Text
Inserted_result	Integer
BudgetTrxId	Integer
TranType	Integer
PeriodId	Integer
SubprojectId	Integer
ResourceClassCode	Text
ResourceCode	Text
ActivityCode	Text
BudgetQty	Integer
RateAmt	Integer
InvTrxCtrlNum	Text
Username	Text
ActivityTypeCode	Text
OverheadRateAmt	Integer
OverheadRatePct	Integer
CostRateAmt	Integer
FlatChargeAmt	Integer
NoChargeFlag	Integer
TrxCtrlNum	Text
RevenuePeriodId	Integer
DateFrom	Date
DateTo	Date
BudgetDesc	Text
CostCode	Text
ExpenseCode	Text
VendorCode	Text
InventoryCode	Text

<b>Table Name</b>	PACREATEPROJECT
<b>Description</b>	Clientele table used for creation of Projects
<b>Field Name</b>	<b>Data Type</b>
Record_identifier (Key Field)	Text
Inserted_result	Integer
Insert_project_as_clone	Integer
Suggest_new_project_id	Integer
Clone_from_project_id	Integer
Apply_general	Integer
Apply_invoicing	Integer
Apply_resources	Integer
Apply_activities	Integer
Apply_budgets	Integer
Apply_payschedules	Integer
Apply_phases	Integer
Apply_reporting	Integer
Apply_markup	Integer
Apply_tasks	Integer
New_client_code	Text
New_project_code	Text
New_project_desc	Text
New_company_code	Text
New_project_status_code	Text

New_project_currency_code	Text
Output_new_project_id	Integer
Username	Text

<b>Table Name</b>	PAPROJECTLINK	
<b>Description</b>	Clientele Opportunity, Service Agreement, Quote link record to a Star Projects Project	
	<b>Field Name</b>	<b>Data Type</b>
	PAPProjectDetails_ID (Key Field)	Text
	Association_ID	Text
	Association_Type	Text
	Project_ID	Number
	ProjectCode	Text
	ClientCode	Tex
	Status	Text
	AddDate	Date/Time
	AddUser	Text
	ChangeDate	Date/Time
	ChangeUser	Text
	RSChangeDate	Date/Time
	RSArriveDate	Date/Time
	RSSite_ID	Text
	Budget_trx_ID	Text

<b>Table Name</b>	PAPRODTRANTYPES	
<b>Description</b>	Clientele Product Type link record to a Star Projects Transaction Types	
	<b>Field Name</b>	<b>Data Type</b>
	Product_type (Key Field)	Text
	Tran_type	Integer

<b>Table Name</b>	PATASKLINK	
<b>Description</b>	Clientele Call link record to a Star Projects Task	
	<b>Field Name</b>	<b>Data Type</b>
	PATaskLink_Id (Key Field)	Text
	Call_Id	Text
	Task_Id	Integer
	Org_Id	Text
	Client_code	Text
	Project_Id	Integer
	Project_code	Text

- The PAClientLink table has a unique index on client\_code.
- The PAPProjectLink table has a unique index on Project\_id.
- Both these indexes can be removed from the CTEL.MDB to allow for multiple Project ID's. If required, do the following:
  - Manually change the value of the check boxes on the Star Projects Integration Options screen.
  - Upsize these tables into the Clientele SQL server.
  - Repair & compact the CTEL.MDB database.
  - Make a copy of the CTEL.MDB and rename it as CTEL.SYS.

## Clientele Database Triggers

- Multiple Triggers need to be loaded on the Clientele tables.
  - a. Org (Organisation), which is used to update the Star Projects Client table (PAClient)
  - b. PACreateBudget
  - c. PACreateBudgetLine
  - d. PACreateProject
  - e. PACreateTRHdr (if using Web TR)
- You now need to load both of the SQL files (eFO73a\_SP6403\_Org.sql and eFO73a\_SP6403\_postlink.sql). To load these SQL files, use Query Analyzer to open, modify and run them. Follow the instructions contained in the file
  - Search for 'ClienteleDatabase' and Replace with your Clientele database name
  - Search for 'StarProjectsDatabase' and Replace with your Star Projects database name
  - Run the script.
- If you are using the Star Projects/eBackOffice integration you now need to load the SQL file eFO73a\_SP6403\_eBO73\_link.sql. To load this SQL file, use Query Analyzer to open, modify and run it. Follow the instructions contained in the file
  - Search for 'StarProjectsDatabase' and Replace with your Star Projects database name
  - Run the script.

## Updating the Databases

- Repair & compact the CTEL.MDB database.
  - Open the CTEL.MDB in Access
  - Select Tools + Database Utilities + Compact and Repair
- If upsized to SQL, make a copy of the CTEL.MDB and rename it as CTEL.SYS.
  - If a CTEL.SYS already exist, delete it or rename it in order to create the new one

## Clientele System Options

The following System Options have been added to Clientele during the Module Move process.

Module	Category	Name	Value
PAIntegration	Project Accounting	PA_TRIntegration	-1
PAIntegration	Project Accounting	PA_TRUserLink	database_username
PAIntegration	Project Accounting	PADefaultProjectStatus	OPEN
PAIntegration	Definitions	PADefnAssociate	Associate
PAIntegration	Definitions	PADefnAssociated	associated
PAIntegration	Definitions	PADefnCall	Call
PAIntegration	Definitions	PADefnDescription	Description
PAIntegration	Definitions	PADefnDisassociate	Disassociate
PAIntegration	Definitions	PADefnDisassociated	disassociated
PAIntegration	Definitions	PADefnEvent	Event
PAIntegration	Definitions	PADefnFrontOffice	Clientele
PAIntegration	Definitions	PADefnOpportunity	Opportunity
PAIntegration	Definitions	PADefnOrg	Organisation
PAIntegration	Definitions	PADefnProposal	Proposal
PAIntegration	Definitions	PADefnQuote	Quote
PAIntegration	Definitions	PADefnRecord	Record
PAIntegration	Definitions	PADefnServAgree	Service Agreement
PAIntegration	Definitions	PADefnSP	Star Projects
PAIntegration	Definitions	PADefnSysAdmin	your System Administrator
PAIntegration	Definitions	PADefnTR	Time Recorder
PAIntegration	Definitions	PAObjectNames	Object Names
PAIntegration	Project Accounting	PAOpportunityProjectMilestone	Waiting for Decision

PAIntegration	Project Accounting	PAOpportunityProposalMilestone	Qualified Lead
PAIntegration	Project Accounting	PAOrgSQLUpdateTriggerInstalled	-1
PAIntegration	Project Accounting	PAProposalClient	SALES
PAIntegration	Project Accounting	PAProposalClose	CLOSED
PAIntegration	Project Accounting	PATaskInt	-1
PAIntegration	Project Accounting	PAUniqueClientLink	0
PAIntegration	Project Accounting	PAUniqueProjectLink	0
PAIntegration	Project Accounting	PAUseQuoteNumber	-1
PAIntegration	Project Accounting	PAUseServiceAgreementNumber	-1

## Clientele System Options

- The values included may not reflect your current set up and should be cross-checked.
  - Set the values from the Star Projects Integration Options screen or choose System Options from the Configuration menu within Clientele.
  - Changing the Unique Client & Project Link Index Installed check boxes does not automatically affect the indexes on the PAClientLink & PAProjectLink tables, this is a manual process undertaken in the CTEL.MDB.
  - Changing the Organization SQL Update Trigger Installed check box does not automatically affect the Upsized Org table in the SQL database, this is a manual process undertaken in the CTEL.MDB.

## Web TimeRecorder Integration

**Prerequisites:** WebTR Database has been installed on the server.

**Linked tables:** Link the trwsxdet & trwsxhdr tables using the same ODBC connection from before, point to the WebTR database.

**System Options:** You will need to check the setting of the PA\_TRIntegration and PA\_TRUserLink system options on the calls tab of the PA Integration Option screen.

## New Clientele Forms

The following new forms have been added to Clientele during the Module Move. They provide the user interface required to set-up Integration between Clientele and Star Projects:

Form	Description
PAAccountInformation	<p>Allows the user to search for Star Projects transactions. The user can enter a Client Code, Project Code, Call Number or Transaction type to narrow down the list of transactions.</p> <p>The form is opened from either the Client Details form (PAClientProjectDetail) or the Project Details form (PAProjectDetail). The Client Code and Project Code search fields will default from the called form.</p> <p>There is also a link to the forms PAInvoice and PALineProperties. When the user selects a transaction they can then choose to review the transaction Invoice, if one exists, or the transaction Options.</p>

Form	Description
PAddClient	<p>This form is used to both associate a new Client to an Organization and to update details for an associated Client.</p> <p>The form is always opened from the form PAClientProjectDetail. If no Client has been associated with an Organization it opens in AddMode else it opens in UpdateMode.</p> <p>When opened in Add mode the user can either enter a Client code or leave it blank for a system generated Client code.</p> <p>If an entered Client code already exists in Star Projects, the user will be prompted if they wish to associate the existing Client. If the client does not exist a new Client record will be created in the Star Projects PAClient table.</p> <p>Each new Client association will have a record created in the new Clientele table PAClientDetails.</p> <p>The user is also able to enter a Company Code, Manager and the Address Types they wish to update in Star Projects (Street, Postal or None). The user is able to change these fields in both Add and Update modes. These changes will be saved in the PAClientDetails.</p>

Form	Description
PAAddProject	<p>This form is used to associate a Clientele Opportunity, Service Agreement or Quote to a Star Projects Project.</p> <p>The form is always opened from the PAMProjectDetail form, from the 'Add Project' button.</p> <p>The Client code and name will always be displayed from the PAMProjectDetail form. The user is not able to change the Client code on this form. Therefore, an Organization Star Projects Client association must exist before the user can link a Clientele Opportunity, Service Agreement or Quote to a Star Projects Project.</p> <p>The user can either enter a Project code or leave it blank for a system-generated code.</p> <p>The system generated Project Code is always the same as the Project ID.</p> <p>If an entered Project code already exists in Star Projects, the user will be prompted if they wish to associate the existing Project. If the Project does not exist a Project record will be created in the Star Projects PAMProject table.</p> <p>Each new Project association will have a record created in the new Clientele table PAMProjectDetails.</p>
PAMClientProjectDetail	<p>This form allows the user to review and change details for the Star Projects Client Associated with a Clientele Organization.</p>
PAMClientSearch	<p>This form is used when a user is trying to associate a Clientele Organization with an existing Star Projects Client.</p> <p>The form is always opened from PAMClientProjectDetails when the user presses the 'Associate' button.</p> <p>When the user selects a Client the details are returned to PAMClientProjectDetail and a link record is created in PAMClientDetails.</p>
PAInvoice	
Form	Description
PALineProperties	<p>There is also a link to the forms PAInvoice and PAOptions. When the user selects a transaction they can then choose to review the transaction Invoice, if one exists, or the</p>

	<p>transaction Options.</p> <p>PAAccountInformation</p>
PAOptions	<p>Before you can start setting up links between Clientele and Star Projects, you will need to set up a number of Interface options.</p> <p>The form can be opened from the menu under 'Tools/Star Projects Integration Options'.</p> <p>The following options can be set:</p> <ol style="list-style-type: none"> <li>1. <u>Opportunity Project Milestone</u> Before an Opportunity can be associated with a Project it must have reached this Milestone.</li> <li>2. <u>Opportunity Proposal Milestone</u> When an opportunity reaches the Proposal Milestone and is yet to reach the Project Milestone, it can only be linked with the Proposal Client code setup in option 3. If the opportunity milestone is before the Proposal Milestone it cannot be associated with a Project.</li> <li>3. <u>Proposal Client</u> Star Projects proposal Client Code.</li> <li>4. <u>Use Service Agreement number as Project Code</u> If true a Project associated with a Service Agreement will have it's Project Code set with the Service Agreement number.</li> <li>5. <u>Use Quote Number as Project Code</u> If true a Project associated with a Quote will have it's Project Code set with the Quote number.</li> </ol>
PAProjectDetail	
PAProjectSearch	<p>This form is used when a user is trying to associate a Clientele Opportunity, Service Agreement or Quote with an existing Star Projects Project.</p> <p>The form is always opened from PAProjectDetails when the user presses the 'Associate' button.</p> <p>When the user selects a Project the details are returned to PAProjectDetail and a link record is created in PAProjectDetails.</p>

Form	Description
PABudget	<p>This form is used to associate a projects budget to the current quote in context. It displays current PA budget transactions. Users can only create new transactions if the quote has Line Items with Part Types that are linked to PA Tran Types and there are no transactions. Users may delete the current budget transactions.</p> <p>Creating new budget transactions adds records to the pabdget table.</p> <p>This form if opened by pressing the 'Budget' buttons on the Quote detail form.</p>
PABudgetWizard	<p>This form is used to create a new Budget code for a Project in the pabdgrx table. It is always opened in add mode.</p> <p>This form adds new records to the pabdgrx table.</p> <p>This form is opened by pressing the 'New' button on the Star Projects Budget form</p>
PAProdTranType	<p>This form is used for adding and editing links between Clientele Part Types and PA Tran Types. Multiple Part Types can be linked to one Tran Type.</p> <p>The form is opened by pressing the 'Add' or 'Edit' buttons on the Find: PA Tran Type / Product Type Link form.</p>
PAProdTranTypeSearch	<p>This form is used for searching current Part Types that are linked to PA Tran Types.</p> <p>The form is opened by pressing the 'Link PA Budget Tran Types to Part Types' button on the Star Projects Integration Options form.</p>