

ClearQuest Domain

Introduction

The ClearQuest domain lets you extract information from objects such as defects, histories, and attachments in your ClearQuest database.

Accessing Database-specific Objects

The ClearQuest integration is database specific. Although you see default ClearQuest objects when you design templates, templates do not have knowledge of the objects that are specific to each database unless you are connected to the ClearQuest Database.

To use objects specific to your database in a template, you must supply the database name in the OPEN command. This triggers the retrieval of the repository schema information that the database was created with. Once the connection has been made to the database, all fields (objects) that can be extracted are now available. This is known as a *dynamic domain*.

Queries

The ClearQuest domain can use all public queries created in ClearQuest, as well as any personal queries to which the current user has access. The queries appear as REPEAT selectors in Template View or Add Command. They are created with the dynamic domain.

ClearQuest allows you to create a query that launches a dialog box to prompt the user for input. It then performs the query using the input as a filter. For example, in a query for a weekly report of new defects, the user could be prompted for a Submit_Date in order to specify all defects submitted since the previous Saturday. When this type of query is used in a template, the input dialog is not launched and that prompt for filter is ignored. Any other non-input filters defined by the query are still used.

Filtering Query Results

You can specify filter criteria for the results of a REPEAT command by clicking on the "Advanced" check box in the REPEAT Command dialog box. For a ClearQuest template, this criteria is passed to the ClearQuest domain during generation, where a SQL query is built corresponding to the specified criteria.

Using the ClearQuest query engine greatly improves performance during generation. There are situations where ClearQuest cannot build a query that corresponds to a filter in a template. In these cases, filtering of the results of the REPEAT command takes place during generation. Since this has a negative effect on performance, it is important to note when these scenarios might occur:

- If you are REPEATing over the results of a ClearQuest query. If a query returns too many rows (for example, more than a few hundred), performance degrades.
- If your Where expression contains the "IS" operator (which is not supported by ClearQuest).
- If you have an expression where both the left- and right-hand sides reference a unary relationship; for example, owner.login_name = submitter.login_name. ClearQuest only supports literals in the right-hand side of an expression.

Attachments

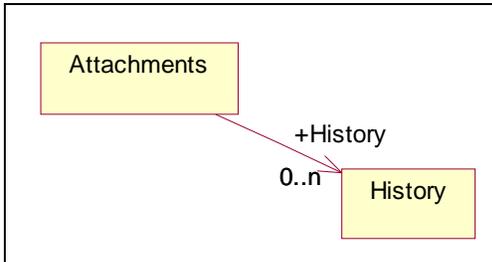
ClearQuest Domain

An attachment is a file associated with a particular record in the database.

Class Hierarchy: Record>Attachments

SubClasses of Attachments

This class has no subclasses.



Properties Specific to Attachments

Properties	Inherited From	Description
Dbid	Record	The internal database ID for the record.
Description		The description of the attachment
Entity_dbid		The database ID for the record that owns (has) the attachment. This identifies the database record (entity) that the attachment record belongs to. An Entity object represents a record in the database.
Entity_fielddef_id		The ID of the field definition (fieldInfo) for a field in the record (entity) that references the attachment. This ID identifies the attachment.
Filename		The name of the attachment
Filesize		The size of the attachment

Properties	Inherited From	Description
FullPath		The location of the attachment. When the FullPath of an Attachment is requested, the attached file is retrieved from ClearQuest and copied to a temporary file on the local system. The name of this temporary file is returned by FullPath. The temporary file is deleted when the record containing the attachment is released.
Id	Record	The record ID.
Is_active	Record	True if the record is active.
Lock_version	Record	The version of the locking mechanism.
Locked_by	Record	The user who locked the record.
Record_type	Record	The type of record.
Version	Record	The version of the record.

Relationships Specific to Attachments

Name	Kind	Class	Description
History	0..n	History	The history records for this attachment.

CQDatabase

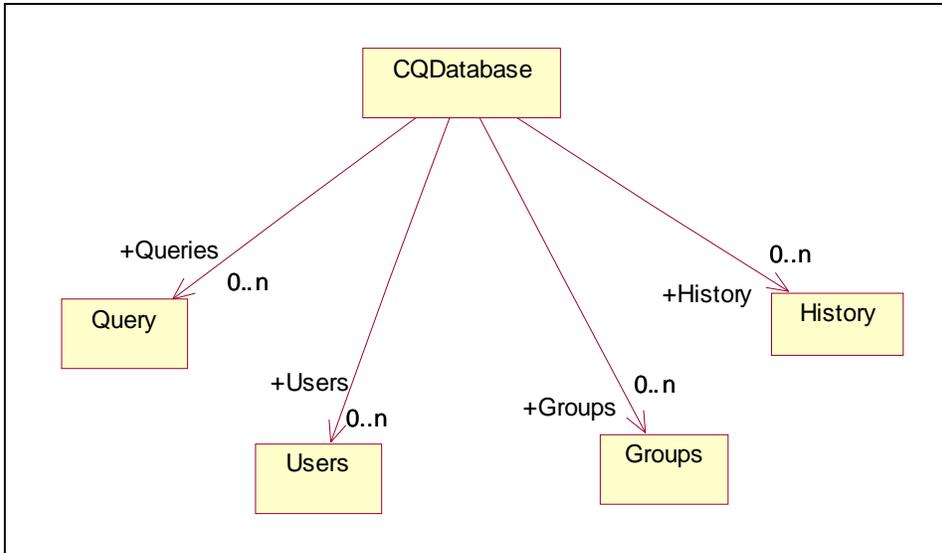
ClearQuest Domain

A CQDatabase contains all user data and a copy of the associated schema.

Class Hierarchy: CQDatabase

SubClasses of CQDatabase

This class has no subclasses.



Properties Specific to CQDatabase

Properties	Inherited From	Description
DatabaseName		Name of the database.
DatabaseSet		DatabaseSet is the name given to a master database or schema. The DatabaseSet name is chosen by the individual user when defining the DatabaseSet.
Description		The description of the database.

Properties	Inherited From	Description
MinimizeSpace		MinimizeSpace effects the performance of the adapter by changing how queries are invoked. By default, MinimizeSpace is FALSE. When it is FALSE, the adapter requests that queries return all simple fields of each result record (this excludes multiline fields such as Description and fields that contain lists). If MinimizeSpace is TRUE, the adapter only requests the result fields that are already defined by queries.
Name		The logical name of the database. The Database Name is the name of a collection of CQ records that conform to the master database or schema.
QualifiedName		The qualified name of the database. The qualified name consists of DatabaseSet and the database Name. <DatabaseSet>:<DatabaseName> For example, CMBU:LABST
SessionType		The database session type.

Relationships Specific to CQDatabase

Name	Kind	Class	Description
Groups	0..n	Groups	All groups stored in the database.
History	0..n	History	The history records for this database.
Queries	0..n	Query	All queries stored in the database.
Users	0..n	Users	All users stored in the database.

Groups

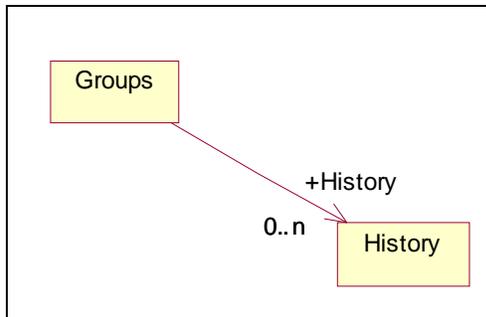
ClearQuest Domain

A group is a list of users with similar privileges.

Class Hierarchy: Record>Groups

SubClasses of Groups

This class has no subclasses.



Properties Specific to Groups

Properties	Inherited From	Description
Dbid	Record	The internal database ID for the record.
Id	Record	The record ID.
Is_active	Record	True if the record is active.
Lock_version	Record	The version of the locking mechanism.
Locked_by	Record	The user who locked the record.
Master_dbid		The master database ID for the Groups object. A master database is a schema repository for one or more user databases.
Name		The name of the group collection.
Record_type	Record	The type of record.
Version	Record	The version of the record.

Relationships Specific to Groups

Name	Kind	Class	Description
History	0..n	History	The history records of this group.

History

ClearQuest Domain

History records all changes made to the records in the database.

Class Hierarchy: Record>History

SubClasses of History

This class has no subclasses.

Properties Specific to History

Properties	Inherited From	Description
Action_name		The action that was entered.
Action_timestamp		The time the action was entered.
Comments		Any comments associated with the event.
Dbid	Record	The internal database ID for the record.
Entity_dbid		The database ID for the record that owns (has) the history. This identifies the database record (entity) that the History record belongs to. An Entity object represents a record in the database.
Entitydef_id		The database ID of the record type.
Entitydef_name		The name of the record type.
Expired_timestamp		The time the history expires.
Id	Record	The record ID.
Is_active	Record	True if the record is active.
Lock_version	Record	The version of the locking mechanism.
Locked_by	Record	The user who locked the record.
New_state		The state of the record following the action.
Old_state		The state of the record prior to the action.
Record_type	Record	The type of record.
User_name		The user who triggered the action.
Version	Record	The version of the record.

Relationships Specific to History

This class has no relationships.

Query

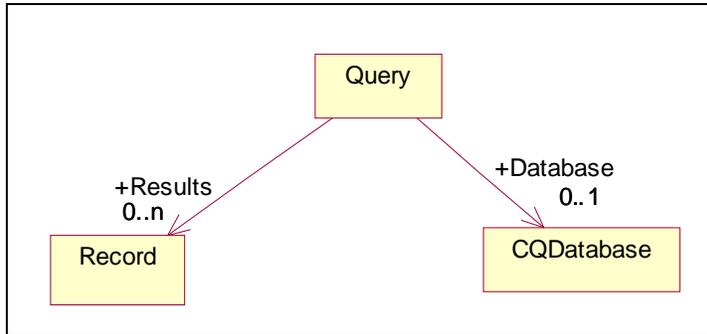
ClearQuest Domain

A query is used to retrieve specific records from a database.

Class Hierarchy: Record>Query

SubClasses of Query

This class has no subclasses.



Properties Specific to Query

Properties	Inherited From	Description
IsAggregated		Returns a Boolean value indicating whether any fields of the query are aggregated.
IsDirty		Returns a Boolean value indicating whether the query has changed.
IsFamilyQuery		Returns TRUE if the Query defines a family.
Name		The name of the Query.
QueryType		The type of query. An integer indicating list, report, or chart.
ResultType		The result type of the query.
SQL		The SQL string associated with the query.

Relationships Specific to Query

Name	Kind	Class	Description
Database	0..1	CQDatabase	The CQDatabase that the Query is associated with.
Results	0..n	Record	The records retrieved by the Query. Evaluated by running the Query when this relationship is accessed.

Record

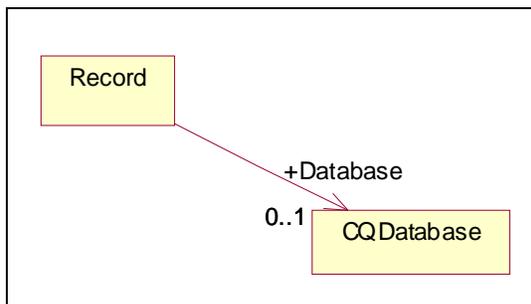
ClearQuest Domain

Records represent the data records the user creates, modifies, and views.

Class Hierarchy: Record

SubClasses of Record

- Attachments
- Groups
- History
- Users



Properties Specific to Record

Properties	Inherited From	Description
Dbid		The internal database ID for the record.
Id		The record ID.
Is_active		True if the record is active.
Lock_version		The version of the locking mechanism.
Locked_by		The user who locked the record.
Record_type		The type of record.
Version		The version of the record.

Relationships Specific to Record

Name	Kind	Class	Description
Database	0..1	CQDatabase	The CQDatabase which this record is associated with.

Users

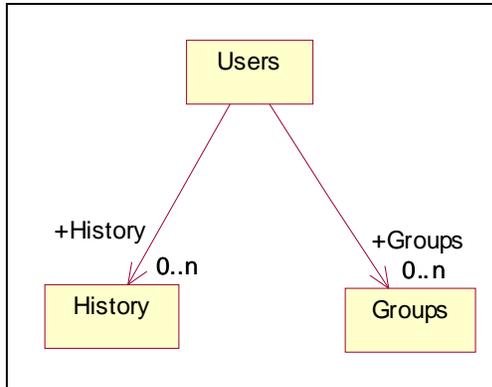
ClearQuest Domain

A user is someone who can log on to the ClearQuest database.

Class Hierarchy: Record>Users

SubClasses of Users

This class has no subclasses.



Properties Specific to Users

Properties	Inherited From	Description
Dbid	Record	The internal database ID for the record.
Email		The email address of the user.
Encrypted_password		The password of the user.
Fullname		The full name of the User.
Id	Record	The record ID.
Is_active	Record	True if the record is active.
Is_appbuilder		True if the user has AppBuilder privileges.
Is_superuser		True if the user is a superuser.
Is_user_maint		True if the user has maintenance privileges.
Lock_version	Record	The version of the locking mechanism.
Locked_by	Record	The user who locked the record.
Login_name		The login name for the User.
Master_dbid		The master database ID. A master database is a schema repository for one or more user databases.
Misc_info		Miscellaneous information.
Phone		The phone number of the user.

Properties	Inherited From	Description
Record_type	Record	The type of record.
Version	Record	The version of the record.

Relationships Specific to Users

Name	Kind	Class	Description
Groups	0..n	Groups	The groups of which this user is a member.
History	0..n	History	The history records for this user record.