# Table of Contents

cctLink PeopleSoft Query Development Lifecycle PCD ................................................................. 1

PHASE I: Query Development ........................................................................................................... 3
- Requirements for Query Manager Access in PCD ........................................................................ 3
- Search for Existing Queries or Reports Before Developing New Queries .............................. 3
- Develop a New Query in PCD Environment .............................................................................. 4
- FERPA (Family Educational Rights and Privacy Act) and the Name Field ................................ 5

Data Dump Queries .......................................................................................................................... 5

Finding Records to Use in Query Development ............................................................................ 5

Naming Conventions ....................................................................................................................... 7

Module Acronyms and Names ........................................................................................................ 7

Query Description ............................................................................................................................ 8

Query Definition ............................................................................................................................. 8

Prompts ............................................................................................................................................ 9

Public not Private Queries ............................................................................................................. 10

Query Organization – Folders and Favorites ............................................................................... 10

Test the Query ............................................................................................................................... 10

Performance Standards ................................................................................................................ 10

PHASE II: Submit a Migration Request ......................................................................................... 11

PHASE III: Migration to Production .............................................................................................. 12
- Query Migration Schedule .......................................................................................................... 12

PHASE IV: Modification of Existing Queries ................................................................................ 13
- Modifying Queries Created by Others ...................................................................................... 13

Other Reporting Tools Development Conventions and Protocol .................................................. 14

BI Publisher Conventions and Protocol ........................................................................................ 14

BI Publisher Naming Convention .................................................................................................. 14

BI Publisher Description ............................................................................................................... 14

BI Publisher Definition .................................................................................................................. 14

BI Publisher folder ....................................................................................................................... 14

BI Publisher Data Sources ............................................................................................................ 14

PS Queries for BI Publisher .......................................................................................................... 14

Connected Queries for BI Publisher ............................................................................................. 16
Composite Query Naming Convention ................................................................. 22
Composite Query Description.................................................................................. 22
Composite Query Definition .................................................................................. 22
Composite Query Folder ....................................................................................... 22
Composite Query Base Queries ............................................................................. 22
  Composite Base Query Naming Convention....................................................... 22
  Composite Base Query Description ................................................................... 24
  Composite Base Query Definition ...................................................................... 24
Who Owns What Queries and Reports? .................................................................. 24
  Queries.................................................................................................................. 24
  Financial Aid Queries .......................................................................................... 24
  Reports.................................................................................................................. 25
Query Maintenance .................................................................................................. 25
Links Provided in this Document ............................................................................ 26
ctcLink PeopleSoft Query Development Lifecycle PCD

Queries written in PeopleSoft Query should be written in the Production College Development (PCD) environment. This means that for a query to be used in the Production environment (PRD), it must first be copied to PRD from PCD. This process is known as query migration. All queries will first be written in PCD and then migrated to PRD. Queries are migrated on Tuesdays and Thursdays.

There are four phases of query development.

- **Phase I** – Query Development in PCD
  - Search for existing queries that may meet the need first before developing a new query.
  - Always follow the correct protocol and conventions when developing a new query.
  - Test the query thoroughly for accurate results.
  - **Note**: All Financial Aid queries, whether new or modifications, require approval from the SBCTC (State Board for Community and Technical Colleges) Financial Aid Support Team.

- **Phase II** – Request migration of the query from PCD to PRD.
  - Queries written in PeopleSoft Query are written in the Production College Development (PCD) environment. This means that for a query to be used in the Production environment (PRD), it must first be copied to PRD from PCD. This process is known as query migration. Queries are migrated on Tuesdays and Thursdays.

- **Phase III** – The query is reviewed for compliance with query standards and then migrated to PRD by SBCTC.
  - This review process ensures consistency in query development.

- **Phase IV** – Optional Phase that pertains to modifying queries that already exist in Production.
  - There are only two modification types allowed:
    - Adding an optional prompt to an existing query
    - Adding an additional field that does NOT result in row duplication
  - All modifications must first be approved by the original Query Developer or by Data Services.
  - **Note**: All Financial Aid queries, including modifications, require approval from the SBCTC Financial Aid Support Team.
  - Modifications must be done in PCD and then migrated to PRD. Modifications of existing queries are not allowed in PRD.
Below is a summary depiction of the ctcLink Query Development Life Cycle (QDLC). The pages that follow will provide additional details related to each phase and step in this process.

**Phase I: Develop Query in PCD**
- Search for an existing query or report. Develop in PCD environment.
- Use standard naming convention.
- Add description to query property.
- Add definition to query property.
- Add prompts instead of hard-coding criteria.
- Make public.
- Store in logical folder.
- Test the query for accuracy, performance, and data validation.

**Phase II: Request Migration to Production (PRD)**
- Submit Service Desk ticket to migrate query to Production.
- Include completed Query Migration Request form with ticket ensuring the query passes all "Pre-Migration Checklist" requirements.

**Phase III: Data Services Migration to Production (PRD)**
- Query will be tested for compliance and functionality by Data Services.
- Data Services submits migration request to Application Services.
- Query will be added to View Query Search Listing in metalink. For access to metalink, please email dataservices@sbctc.edu.

**Phase IV: Modification of Existing Query**
- Understand how a modification will impact the original purpose of the query.
- Determine if a modification is acceptable or if a new query needs to be developed. If modifying an existing query, make a copy first.
- Check if the change is acceptable to the original Query Developer or, if not able to locate this person, check with Data Services for approval to change.
- Repeat QDLC starting at the second step of Phase I.
- If desired, request that the original query be removed from PRD.
PHASE I: Query Development
Requirements for Query Manager Access in PCD

The document Structure for Query Manager Access discusses all the requirements for access to Query Manager in PCD in more detail; however, the basic requirements to gain access to Query Manager in PCD is to turn in a signed Non-Disclosure Agreement as well as complete both the PeopleSoft Query 101 Basics course as well as the QDLC course.

Non-Disclosure Agreement
A security measure initiated by Data Services is the Non-Disclosure Agreement (NDA). Each Query Developer must sign this document and have their Reporting Lead sign it as well. If a signed NDA is not received by Data Services, access to Query Manager in PCD will not be granted. Once signed (electronic signatures are acceptable), return it to Paula McDaniel at pmcdaniel@sbctc.edu or dataservices@sbctc.edu. The NDA form is also used for dataLink Developers. If a person is both a dataLink Developer and a Query Developer, only one form is required. Either the Reporting Lead or the IT Director must sign the form, not both.

Required Courses for Access to Query Manager
Query Developers must pass the final assessments for the Query Development Life Cycle (QDLC) course as well as the ctcLink PeopleSoft Query 101 Basics course with a score of 80% or better. These are competency-based courses, so it is only necessary to complete the final assessments successfully to pass the courses.

Search for Existing Queries or Reports Before Developing New Queries

Always search existing queries or reports before creating a new query. This can potentially save a large amount of time and resources. If a query is found that is close, a Query Developer can use it as the foundation for a new query by using “Save As”. (See Phase IV of the QDLC) There are many existing queries, so it is likely a usable query has already been developed. Note: All FA queries, whether new or modified, must first be approved by the SBCTC Financial Aid Support Team.

While we will be learning how to search in the PeopleSoft Query 101 Basics course for developers and the Reporting Course for end users, it is important to note that there are various methods for searching for queries—either in PeopleSoft or in metaLink.

PeopleSoft Query Basic Search

- Search using the operator “Begins With” by multiple search criteria including:
  - Access Group Name
  - Description
  - Folder Name
  - Owner
  - Query Name
  - Type
  - Uses Field Name
  - Uses Record Name
PeopleSoft Query Advanced Search

- Search using the same search criteria as the basic search but with the choice of the following operators:
  - <
  - <=
  - =
  - >
  - >=
  - Begins With
  - Between
  - Contains
  - In
  - Not =

Searching for Queries within metaLink

metaLink is a data dictionary provided by Data Services where users can also search for queries, reports, and pivot grids. metaLink offers the benefit of being able to search for queries based on the Definition Field (Long Description), which has no character limit but is not available to see in Query Viewer. Query Viewer only displays the Description field, which is limited to 30 characters, so being able to search on the Definition field is a major benefit to performing query searches using metaLink. Users can also use metaLink to search for both field and record metadata to gain valuable insight into the data structure. Using metaLink is covered in the PeopleSoft Query 201 Intermediate course or in the stand-alone course How to Use metaLink.

The key features of metaLink allow designated users to:

- Document structures and properties for a given record or field
- Track and record changes by user, date, and what was changed
- View the ctcLink reporting catalog
- Search for available queries, reports, and pivot grids
- View data dictionary reports (requires a password)
  - Please submit all requests for metaLink passwords to: dataservices@sbctc.edu

Develop a New Query in PCD Environment

PCD contains the three pillar instances: Campus Solutions (CS), Finance (FIN), and Human Capital Management (HCM). Designated Query Developers develop queries in the PCD environment, not in the PRD environment. This ensures that the queries in PRD have been tested, meet standards, and do not affect PRD performance. Why are queries not developed in PDV? Because Query Developers are developing queries, not views, tables, pages, or procedures. Developing queries in PCD is acceptable and reduces the development time by eliminating one migration request step. The PDV environment is also refreshed at a slower rate than the PCD environment.

Some developers prefer to store their draft queries in a personal folder. This is allowed, but just make sure that the query has been added to the correct folder prior to requesting migration. Data Services maintains a list of allowed folder names in the Query Folder List per Pillar document. Folder names are free text and are automatically migrated with the query.
The PCD environment is typically refreshed on the first Monday of every month from PRD. The environment is available for use Monday – Friday from 7 am to 7 pm.

**FERPA (Family Educational Rights and Privacy Act) and the Name Field**

When displaying a student name in query results, it is required to add the field FERPA_BLOCK to the query results as well. To do this, the Query Developer add the student's name to the query using either the view VCS_BIO_PRIORTY or VCS_BIO_PRIMARY. No other record or view is allowed to be used for this purpose. The VCS_BIO_PRIORTY view will prioritize the preferred name, over the primary name, if it is available, while the VCS_BIO_PRIMARY view will prioritize the primary name, over the preferred name, if it is available. A process is in place to ensure that every student has a primary name, at a minimum.

**Data Dump Queries**

Data dump queries may be useful to Query Developers for studying record details or to developers or end users to use for data analysis. We recommend data dump queries in the Production College Development (PCD) environment for studying record details and in Production (PRD) for data analysis.

There are many existing data dump queries. They will contain “data dump” in the query description. Data dump queries in PRD may also be requested. Please see Data Dump Query Protocol for more information.

**Finding Records to Use in Query Development**

One of the most challenging steps in developing a query, especially for those new to PeopleSoft, is to determine which table (record) contains the data needed. Query Developers use records and views to create new queries. A record is a delivered table, and a view is a table that is created by Data Services.

**Commonly Used Tables**

Find common records and views to use by pillar in the following spreadsheets:

- Campus Solutions Commonly Used Tables
- Finance Commonly Used Tables
- Human Capital Management Commonly Used Tables

We will learn the steps for using shortcut keys/extensions to find record and field information in the ctcLink PeopleSoft Query 201 Intermediate course, however, the shortcut keys and extensions are included here as a reference for the correct processes to follow for finding the records and fields, which are being written to from a particular front end page.
**CTRL + SHIFT + J**

One trick to determining the record is to first locate the PeopleSoft page where the data is entered. While on that page, use the keystrokes CTRL + SHIFT + J. This will bring up a new page that lists the technical page name. This functionality is not available in the PRD environment.

Next, run the query QXX_PSPNLFIELD where XX is the pillar acronym. The query will prompt for the page name. The query will then return each field shown on the page and the corresponding record and field names.

**CTRL + SHIFT + C**

Another method of finding record and field information is to use CTRL + SHIFT + C. Use a mouse to hover over the field to see the field and record name. This tool is not available in Internet Explorer.

**PSChrome Extension**

Also consider downloading the PSChrome Extension. It is available to search for at: https://google.com/chrome/webstore Search for “PeopleSoft” in the search bar and then download PSChrome. The extension allows for searching page information and field information from any PeopleSoft screen.

**metaLink**

metaLink is the data dictionary provided by Data Services. Search record and field information using the data dictionary reports. A password is required to access the data dictionary reports. Please submit all requests for metaLink passwords to: dataservices@sbctc.edu. For more information on metaLink view the course How to Use metaLink.
Naming Conventions

It is extremely important to follow the proper naming conventions when developing queries. Query names reflect the query owners, as well as facilitate searching. Additionally, improperly named queries in the PCD environment could potentially be deleted if they do not follow the correct conventions.

Queries Being Migrated to Production

Queries should all follow the same naming convention to aid in searching and identification.

The correct protocol is to start the query name with Q (for query), or V (for View) followed by the pillar abbreviations:

- CS – for Campus Solutions
- FS – for Finance
- HC – For Human Capital

For example, a query for Campus Solutions would start with QCS. This beginning section of the name is then followed by the two-character module abbreviation, which is then in turn followed by a description. As query names do not allow for spaces or special characters, underscores are used for spaces.

Note: Only Data Services or ctcLink Project staff are allowed to create views.

An example of a correctly formatted query name is:

QCS_AA_ENROLLED_NO_ADVISOR

Queries in Development in PCD

Queries that are in development in the PCD environment must begin with DEV_. Change the name to the standard naming convention for queries in Production when migrating the query. Before migration, maintain the naming convention of DEV_. Queries that do not have DEV_ as their prefix will be lost during refreshes of the PCD environment.

Module Acronyms and Names

The Data Services Reporting Team maintains a list of the module acronyms and names by pillar called the Query Module List by Pillar.
Query Description

Describe the query using the Query Property Description and Definition fields.

- The Description field is 30 characters. Try to use a description that will best identify the query and will also facilitate searching.

Query Definition

The Definition field allows for an unlimited number of characters. Use this field for a detailed description of the query to include its use, association to a business process, any criteria that have been applied, and the original creator of the query.

New Queries

Include the following in the Query Definition field:

- Detailed description of the purpose of the query.
- Any specific criteria applied, for example, “Selects using Student Group SINT”.
- Key search terms.
- Describe any changes or updates made to an existing query including approval for the modification.
- College code, name, and email address of developer, for example, 890: pmcdaniel@sbctc.edu Paula McDaniel
- Date query was created.

Existing Queries

If adding to an existing Query Definition, place the latest information at the top of the list with a dashed line between the new and existing entries. This will allow the definition to be read clearly in descending order. Always include college code, email address and update date as the first line. Describe the changes made to the query. If the update is in relation to a ticket, please include the ticket number in the updated definition note.

Example:

890: tmorrill@sbctc.edu Tami Morrill 07/16/2019 #123456
Removed query prompt table so that private queries can also be researched

----

890: tmorrill@sbctc.edu Tami Morrill 06/17/2019
Displays the query records and Y/N 1/0 flag to indicate that the record is associated to a Data Services query tree. If all records are 1, then review Query Record access for User in query QCS_DS_QUERY_RECORD_USER_RPT.
Edited by SBCTC Only Queries

Some queries can only be modified by SBCTC. They will have “**Edited by SBCTC only**” as the first line of the Query Definition field. This must remain as the first statement. These definitions will adhere to the following format:

- “**Edited by SBCTC only**” will always appear as the first line of the definition.
- All new entries will be separated with a dashed line.
- All entries will appear in descending order by date below the first line.
- All entries will include college code, email address and update date.

Example

** Edited by SBCTC only**

----

890: tmorrill@sbctc.edu Tami Morrill 07/22/2019 #123456
Updated listing for HS records/fields

----

890: tmorrill@sbctc.edu Tami Morrill 07/16/2019
Removed query prompt table so that private queries can also be researched.

----

890: tmorrill@sbctc.edu Tami Morrill 06/17/2019
Displays the query records and Y/N 1/0 flag to indicate that the record is associated to a Data Services query tree. If all records are 1, then review Query Record access for User in query QCS_DS_QUERY_RECORD_USER_RPT.

Prompts

Runtime Prompts are pop-up selection windows that appear when the query is run which ask the end user to enter or select something from a list – for example, a specific institution. It is important to keep in mind that college-identifying prompts must be developed for every query to increase the value of the query and for security. If a query is developed for a specific institution, that query will only ever be good for that institution; however, if a prompt is used where the end user selects their institution, the query now becomes usable for everyone, regardless of institution. Queries will be reviewed for prompts before migration. Queries without prompts will not be migrated.

Query Prompt Table Security

Though query security is determined based on the roles assigned to each developer, it is required to add an additional layer of security through prompts. As stated above, all queries in all pillars should include an Institution, Company, Business Unit, or SetID prompt. All pillars have secure records that are required to be used with one of these college-identifying fields as a prompt. Any exceptions to this rule must first be approved by Data Services. Required Secure Prompt Tables as well as other recommended Prompt Tables are found in the document Prompt Tables to Use.

Commonly Used Prompt Tables

The Prompt Tables to Use document also includes a list of fields commonly used as prompts and their corresponding recommended prompt table by pillar. It can be helpful to refer to this document when creating prompts.
Public not Private Queries

Queries in PCD can be saved either private or public. ctcLink queries being migrated from PCD to PRD should always be saved as public so they can be seen and used by everyone. If all queries are public, it will prevent the duplication of effort that could happen if a query were private and not visible to others so was then reproduced.

Query Organization – Folders and Favorites

Folders can be used to categorize and organize queries. Queries may only be stored in one folder at a time. Query folder organization is defined in the document Query Folder List per Pillar. If a new folder assignment is desired, please submit a ticket to Data Services → ctcLink Reporting → Other. Some developers prefer to store draft queries in PCD in a personal folder, which is acceptable, just make sure to remove or change the folder name prior to making a migration request. Queries not in the proper folder will not be migrated.

In addition to folders, users may also save queries in a favorites list for easy access and organization.

Test the Query

Once the development of the query has been completed, the next step is to test that it returns correct results and adheres to the Query Development Standards outlined in this document. Testing the query prior to submitting a migration request will help ensure that the migration into the Production environment will happen quickly. It may be helpful to use the Query Migration Request Form as a guide to query testing. Please also include the prompt values used in testing in the Query Migration Request Form.

Performance Standards

Users will also need to test that their query is efficient and does not take too long to run. Inefficient queries can use up valuable resources. The best way to ensure the query is efficient is to run it and verify that its run-time is less than one minute, preferably just a few seconds. Also aim to have the smallest number of rows returned by the query as possible. A good sign that the query is returning too many rows is if the message “Query Result Set Too Large” is received indicating that scheduling the query is required to see the full results.
PHASE II: Submit a Migration Request

The last step in the development process, and the second phase of the overall QDLC, is to request the query be migrated into the PRD environment. Follow the steps below:

- Log in into the SBCTC Service Desk
- If not prompted into the Request screen, click in the “Request” icon.

- On Request Type, select “SBCTC Data Services”, which will bring a second drop-down list.
- Select “ctcLink Reporting”, which will bring a third drop-down list.
- Select “Migration Request”.
- Fill in the “Subject” field.
- Describe the request with as much detail as possible.
- Choose the PeopleSoft Pillar from the drop-down list. This is a required field.
- From the “Instructions” field, click on the link “Query Migration Request Form” to open the form.
- Click “Enable Editing” button, if necessary, and completely fill out the form
- Source Environment is normally PCD
- Target Environment is normally PRD
- Fill out the Query Migration Request form completely
- Click “Save As” to save the form on the users’ PC (the completed form needs to be attached in the Migration Request)
The Next step is to attach the Query Migration Request Form to the Migration Request:

- Click “Add File” button
- Click “Browse” to find the file
- Once found, click “Open”
- Click “Upload”, once done the file name should be seen below the “Add File” button
- Location stays as SBCTC.
- Finally, click “Save”

The Data Services Reporting Team maintains an example copy of the Query Migration Request Form online.

The Query Migration Request Form is used by Data Services and helps ensure that the Query Developer has reviewed their query for compliance and performance before submitting for migration. This form can also be used as a guide during development work to ensure the standards described in this document are being followed.

PHASE III: Migration to Production
Data Services will review the query for compliance and functionality, not accuracy. If there are any concerns with the query or its compliance to any of the standards listed in this document, it will be sent back to the developer to resolve before migration. Once the query is approved by Data Services, it is sent to the Application Services team for migration. The query will be added to View Query Search Listing in metaLink. For access to metaLink, please email dataservices@sbctc.edu with your name, email address, phone number, and college.

Query Migration Schedule
Query Migrations occur twice a week on Tuesdays and Thursdays.

If you intend to have your query migrated on Tuesday, the latest time to submit your migration request ticket is Monday at 12pm. If your ticket is not submitted on or before 12pm, your query will be reviewed for migration during the next migration window.

Also, if you intend to have your query migrated on Thursday, please submit your migration request ticket by Wednesday at 12pm. If your ticket is not submitted on or before 12pm, your query will be reviewed for migration during the next migration window.

Query requests sent for migration by Monday at 12pm should be available in Production on Wednesday morning, while those sent in by 12pm on Wednesday should be available in Production by Friday morning.
PHASE IV: Modification of Existing Queries

Modifying Queries Created by Others

Please do not modify any existing queries without first analyzing the impact of the modification with the original creator or the ERP (Enterprise Resource Planning) Pillar lead. Approval is always required to make a modification to an existing query. Some queries are used for business processes and changing the query may have a negative impact on the process. If approved to make changes to an existing query, make a copy first.

If a query is found that is very close to what is needed but that is not quite right, it is recommended to use that query as a base that can then be changed to fit current needs. These queries must be saved using “Save As” to save the query to a new name after which, the query can then be modified. All FA queries, whether new or for a modification, must first be approved by the SBCTC Financial Aid Support Team.

Modifying QX-X_ or CTC_ (where XX is the pillar acronym)

- First try to determine who created the query by looking at the definition within the Query Properties. If no name, look to see who the last person was to modify the query. If unable to determine a specific person to ask for approval, assign to the ERP Pillar Lead via the Service Desk to request the modification. Once ERP Support has made their decision the query will be assigned to Data Services.

Modifying QCS_FA or CTC_FA Financial Aid Queries

- All Financial Aid queries, both new query requests and modification of existing queries, need to be approved by the SBCTC Financial Aid Support Team.
- Assign to the Financial Aid Pillar Lead via the Service Desk to request modification.

Modifying Delivered Queries

Queries that are delivered by Oracle are found in the DELIVERED folder. These queries do not follow the QXX or CTC naming convention. If a Query Developer makes a modification to one of these queries, any changes made will be overwritten and lost at the next system upgrade. Therefore, all changes to a delivered query must be saved as a new query using the “Save As” button. The new queries must follow the standard conventions listed in this document.
Other Reporting Tools Development Conventions and Protocol

While creating queries will be the main area most Query Developers will work in, there are additional reporting tools that will become available for use as the Query Developer gains skill and knowledge. Following the correct conventions when using these tools is also especially important for consistency and continuity in searching.

BI Publisher Conventions and Protocol

BI Publisher is a PeopleSoft delivered reporting tool that allows users to choose the output type of a report and for specific formatting and presentation of data. These reports use queries, Connected Queries, or Composite Queries as data sources. BI Publisher reports follow the same naming convention as standard queries with the caveat that they will begin with B, which stands for BI Publisher.

BI Publisher Naming Convention

The naming convention for BI Publisher reports only begins with B instead of BI to save space as the name can only be 12 characters long.

- Example: BFS_EX_GLBAL

BI Publisher Description

Enter a brief description of the report.

BI Publisher Definition

BI Publisher reports do not have the standard Definition field found in Query Manager. Enter as much information as possible into the query that will form the data source for the BI Publisher report.

BI Publisher folder

BI Publisher reports are not stored in folders. The standard queries that make up the BI Publisher report are. Any standard query used in a BI Publisher report must be stored in the BI PUBLISHER folder.

BI Publisher Data Sources

Data sources for BI Publisher reports are:

- PS Queries
- Connected Queries
- Composite Queries

PS Queries for BI Publisher

Queries used as data sources for BI Publisher should have a BI designation at the beginning of the query name. The naming convention is: BIXX_XX_XXXXXXXX.

- Example: BIFS_AR_ITEM_DST_GL
Queries used in BI Publisher must be stored in the BI PUBLISHER folder.
Connected Queries for BI Publisher

Connected Query allows for the creation of a single XML file based on a set of queries with parent-child relationships. Please see the Connected Query section of this document for information on Connected Query and protocol.

Composite Queries for BI Publisher

Composite Query enables you to combine data from existing base queries and then apply filters, aggregates, and so on before presenting the report results, which show the combined data set. Please see the Composite Query section of this document for information on Composite Query and protocol.

Pivot Grid Conventions and Protocol

Pivot Grid will allow Query Developers to create graphical representations of data in a visually effective and efficient manner.

Pivot Grid Naming Convention

The Pivot Grid naming convention is: PGXX_XXXXXXXXXX.
- Example: PGCS_FTE_SUMMARY
  PG/Pillar  Description

Pivot Grid Description

The Pivot Grid description field is the only area where developers can enter notes about the grid. There is no definition field for a Pivot Grid; however, there is a large character limit on the description field. Include as many of the following as possible when entering the description:
- Detailed description of purpose of Pivot Grid
- Any specific aggregation applied
- Include key search terms
- Describe any changes or updates made to an existing grid including approval for the modification
- College code and email address of developer, for example, 890: pmcdaniel@sbctc.edu
- Date Pivot Grid was created or updated
- Business process number, if applicable
- If adding to the Description, place the latest information at the top of the list with a dashed line between the new and existing entries. This will allow the definition to be read clearly in descending order

Pivot Grid Definition

There is no definition field for Pivot Grids. Use the description field provided to write a thorough description of the Pivot Grid as explained above in Pivot Grid Description.

Pivot Grid Folder

Pivot Grids are not stored in folders. The standard queries that make up the Pivot Grid are. Any standard query used in a Pivot Grid report will be stored in the PIVOT GRID folder.
Pivot Grid Data Sources
Available Pivot Grid data sources are:
  - Standard Queries
  - Composite Queries
  - Components

PS Queries for Pivot Grid
Queries used as data sources for Pivot Grids should have a PG designation at the beginning of the query name. The naming convention is: PGXX_XX_XXXX
  - Example: PGFS_AR_ITEM_DST_GL

Queries used in Pivot Grids must be stored in the PIVOT GRID folder.

Composite Queries for Pivot Grid
Composite Query enables you to combine data from existing base queries and then apply filters, aggregates, and so on before presenting the report results, which show the combined data set. Please see the Composite Query section of this document for information on Composite Query and protocol. Composite Queries can be used as a data source for Pivot Grids.

Components for Pivot Grid
Using a component as a data source for a Pivot Grid allows the developer to select a component and create a Pivot Grid based on the component properties.

nVision Conventions and Protocol
PS/nVision is a sophisticated tool for creating business reports in Microsoft Excel. Working within Microsoft Excel, users can create a report layout that defines both the data to retrieve and the format of the report. Using PS/nVision, users can create report layouts that summarize information from the PeopleSoft database and use the drill down feature to expose the supporting details. Users can share report layouts across multiple business units and time periods, creating reports that “roll” from unit to unit or period to period without changing the data-retrieval criteria.
PS/nVision works within spreadsheets. Access PS/nVision features from a special PS/nVision menu within Microsoft Excel to create templates (layouts) for data retrieval. Once a report layout is created (XNV file), users can use it to automatically format data. PS/nVision selects data from the PeopleSoft database using ledgers, trees, and queries.

nVision Naming Convention
Because of the extremely limited character allocation for nVision report names, the naming convention for nVision reports is only the report description. nVision report names are limited to 7 characters. There are no delivered nVision reports from which we would need to differentiate our custom reports so a designation of NXX is not necessary.
  - Example: IPEDS (Integrated Postsecondary Education Data System)
Note: Only State Board staff will have access to create nVision reports.

**nVision Description**

Enter a brief description of the report in the Title field of Define Report Request

**nVision Definition**

nVision reports do not have a definition field. Enter as much information as possible in the query definition if using a query as a data source.

**nVision Folder**

nVision reports are not stored in folders. Any standard query used in a nVision report will be stored in the NVISION folder.

**nVision Data Sources**

nVision data sources are:

- Standard Queries
- Ledgers
- Trees

**PS Queries for nVision**

Queries used as data sources for nVision should have the NV designation at the beginning of the query or Connected Query name. The naming convention is: NVXX_XX_XXXXX.

- Example: NVFS_AR_ITEM_DST_GL

Queries used in nVision reports must be stored in the NVISION folder.

**Ledgers and Trees for nVision**

Ledgers and Trees are already named and do not require further conventions when used as data sources for nVision reports.

**Connected Queries**

Connected Queries are used as data sources for reports that use XML as they only produce XML. ctcLink currently only uses Connected Queries as data sources for BI Publisher reports. PeopleSoft Connected Query allows for the creation of a single XML file based on a set of queries with parent-child relationships. It is important to designate which queries make up the Connected Query and what their role is within the Connected Query.

Connected Queries can be “broken down” into three parts:

- Connected Query – hierarchal object created from multiple existing queries, which produces the XML output.
- Parent Query – A parent query is a query that has one or many child queries. The parent query is the top-level query in a Connected Query. The top-level query should normally be where prompts are developed.
Child Query – A child query is a query that has a single parent query. A child query can have one or more sibling queries. Fields in a child query are mapped to related fields in the immediate parent query.

Connected queries are found in the Connected Query Manager or Connected Query Viewer but only produce XML. A Connected Query is created by connecting parent and child queries together by mapping related fields. An example of when to use a Connected Query would be for a report that includes detailed as well as totaled information. The Connected Query creates the final XML output that is then used as a data source for BI Publisher or other tools that can use XML.

Connected Query Conventions Overview

The Connected Query is designated by the prefix CQXX where XX is the pillar name. The parent query is a standard PS Query and is designated by the prefix CQXX and a suffix of _P to designate it as a parent query. Each child query is also a standard PS query and is also designated by the prefix CQXX but will have a suffix of _X where X is the child number to designate it as a child query. The number does not denote any particular order but is instead just a way of differentiating each child query since all queries used in a Connected Query, as well as the final Connected Query report, share the same base name. Use the description field for each parent and child query to provide a brief description of the purpose of the query.

Example:
- Connected Query: CQHC_PY_PAYROLL_REGISTER
- Parent Query: CQHC_PY_PAYROLL_REGISTER_P
- Child Queries: CQHC_PY_PAYROLL_REGISTER_1
  CQHC_PY_PAYROLL_REGISTER_2
  CQHC_PY_PAYROLL_REGISTER_3

All queries share the same base name.

Examples and child queries should be stored in the folder of the object being created. For example, queries being created for a BI Publisher report would be stored in the BI PUBLISHER folder.

Example: Connected Query – CQCS_SF_ITEM_DUE_AS_OF

Connected Query Naming Convention

Connected Queries will begin with CQ. There is a 30-character limit on the Connected Query’s name.
CQXX_XX_XXX........XXXX – where CQ stands for Connected Query

Example: CQHC_PY_PAYROLL_REGISTER

Connected Query Description

Enter the description of the report.

Example: “Payroll Register Report”

Connected Query Definition

Connected Queries do not have the standard Definition field found in Query Manager. However, there is a Comments box underneath the Description where additional information related to the Connected
Query should be stored. Related queries are listed in the body of the Connected Query manager page and do not have to be further defined in the comments section.

**Connected Query Folder**

Connected Query reports are not stored in folders. Parent and child queries should be stored in the folder of the object being created. For example, queries being created for a BI Publisher report would be stored in the BI PUBLISHER folder.

**Connected Query Parent and Child Queries**

Parent queries are standard queries found within Query Manager, so it is important to designate them appropriately, so they do not get used or modified incorrectly. They will start with CQ to designate them as part of a Connected Query.

**Parent Query Naming Convention**

CQXX_XX_XXX……XXX_P – where P stands for Connected Query Parent
- Example: CQHC_PY_PAYROLLREGISTER_P

Parent queries should be stored in the folder of the object being created. For example, queries being created for a BI Publisher report should be stored in the BI PUBLISHER folder.

**Parent Query Description**

Enter a brief description of the query.
- Example: “Payroll Register Report by College”

**Parent Query Definition**

Enter additional details regarding the Parent Query. Related queries are listed in the body of the Connected Query manager page and do not have to be further defined in the query definition.
- Example: 890:lpetersen@sbctc.edu Lucy Peterson 10/04/2017 Used in Connected Query: CQHC_PY_PAYROLLREGISTER

**Child Query Naming Convention**

Child queries are standard queries found within Query Manager, so it is important to designate them appropriately, so they do not get used or modified incorrectly. They will start with CQ as they will be used in a Connected Query.

CQXX_XX_XXX……XXX_1 - where 1 stands for Connected Query Child 1
CQXX_XX_XXX……XXX_2 - where 2 stands for Connected Query Child 2
CQXX_XX_XXX……XXX_3 - where 3 stands for Connected Query Child 3
- Example: CQHC_PY_PAYROLLREGISTER_1
  CQHC_PY_PAYROLLREGISTER_2
  CQHC_PY_PAYROLLREGISTER_3

CC/Pillar Module Description Connected Query Child Number Suffix
Child queries should be stored in the folder of the object being created. For example, queries being created for a BI Publisher report should be stored in the BI PUBLISHER folder.

**Child Query Description**

Enter a brief description of the query.
- Example: “Payroll Register Report Totals”

**Child Query Definition**

Enter additional details regarding the Child Query. Related queries are listed in the body of the Connected Query manager page and do not have to be further defined in the query definition.
- Example: 890:lpeterson@sbctc.edu Lucy Peterson 10/04/2017 Used in Connected Query: CQHC_PY_PAYROLL_REGISTER

**Composite Queries**

Composite Query enables users to combine data from existing base queries and then apply filters, aggregates, and so on before presenting the report results, which show the combined data set. Composite Query retrieves multiple levels of related information on existing base queries and presents the combined data as a single and flattened query result. The Composite Query is comprised of multiple base queries. It is important to designate which queries make up part of a Composite Query and what their role is within the Composite Query. Composite Queries can be “broken down” into two parts:

- Composite Query - hierarchical object created from multiple existing queries.
- Base Query - A query that is joined by field to other queries then tied together as a Composite Query that can be used as a data source for Pivot Grid.

Composite Queries are found in the Composite Query Manager. A Composite Query is created by connecting multiple standard PS queries together. Composite Queries can be used as data sources for BI Publisher, Pivot Grid, or they can be run in Composite Query Manager to preview the results.

**Composite Query Conventions Overview**

The Composite Query is designated by the prefix COXX where XX is the pillar name. The base queries are designated by the suffix _X where X is the base query number. The descriptive portion of the names for the final Composite Query and the base queries should be the same for continuity, only if the base queries are being developed specifically for use in a Composite Query. Remember, Composite Queries use standard PS Queries, so it is possible to just use existing queries in a Composite Query. In that instance, the name of the existing PS query does not need to be changed. Just update the query definition field to include that the query is being used as part of a Composite Query and list the Composite Query name and any sibling base queries. The query will continue to run as a stand-alone query and as part of the Composite Query.

- Example 1 – Base queries are being developed specifically for use in a Composite Query:
  - Composite Query: COHC_PY_COMPOSITE_EXAMPLE
  - Base Queries: COHC_PY_COMPOSITE_EXAMPLE_1
  - COHC_PY_COMPOSITE_EXAMPLE_2
  - COHC_PY_COMPOSITE_EXAMPLE_3

- Note that all queries share the same base name.
Example 2 – Base queries are pre-existing standard PS queries
  - Composite Query: COHC_PY_COMPOSITE EXAMPLE_2
  - Base Queries: QCS_SR_ENROLL QCS_SF_DUE_AMT
  - Note that the base queries names do not change, even though they are being used in a Composite Query

Composite Query Naming Convention
COXX_XX_XXXXXX – where CO stands for Composite Query. There is a 30-character limit on the Composite Query’s name.

  - Example: COCS_PY_COMPOSITE EXAMPLE

Composite Query Description
Enter a brief description of the Composite Query.

  - Example: “Payroll Register Report”

Composite Query Definition
Composite Queries do not have the standard Definition field found in Query Manager. However, there is a Comments box available in the Properties section of the Composite Query where additional information related to the Composite Query should be stored. Related queries are listed in the body of the Composite Query Manager page and do not have to be further defined in the Comments section.

Composite Query Folder
Composite Query reports are not stored in folders. Queries developed specifically for use in Composite Query should be stored in the folder of the object being created. For example, queries being created for a Pivot Grid report would be stored in the PIVOT GRID folder, whereas queries being developed for BI Publisher would be stored in the BI PUBLISHER folder.

Standard queries not specifically developed for use in Composite Query should remain in their current folder. The Definition field in the query should be updated to indicate the query is also used as part of a Composite Query.

Composite Query Base Queries
Base queries are standard queries found within Query Manager. They can be developed for use in a Composite Query, or existing standard PS Queries can be used as well.

Composite Base Query Naming Convention
If a query is being developed specifically for use in a Composite Query use the following convention:
COXX_XX_XXX......XXXX_1 - where 1 stands for Composite Base Query 1
COXX_XX_XXX......XXXX_2 - where 2 stands for Composite Base Query 2
COXX_XX_XXX......XXXX_3 - where 3 stands for Composite Base Query 3

  - Example: COHC_PY_COMPOSITE EXAMPLE_1
Queries developed specifically for use in Composite Query should be stored in the folder of the object being created. For example, queries being created for a Pivot Grid report would be stored in the PIVOT GRID folder, whereas queries being developed for BI Publisher would be stored in the BI PUBLISHER folder.
If a standard PS query is being used in a Composite Query, do not change the name of the base query. Simply update the query definition field to include that the query is being used as part of a Composite Query and list the Composite Query name.

- Example: QCS_SR_ENROLL
  QCS_SF_DUE_AMT
  Pillar Module Description

Standard queries not specifically developed for use in Composite Query should remain in their current folder. The Definition field should be updated to indicate the query is also used as part of a Composite Query.

Composite Base Query Description

Enter a brief description of the query.

- Example: “Payroll Register Report”

Composite Base Query Definition

Enter additional details regarding the base query including the name of the Composite Query. Related queries are listed in the body of the Composite Query Manager page and do not have to be further defined in the query definition.

- Example: 890: lpeterson@sbctc.edu Lucy Peterson 10/04/2017
  Used in Composite Query: COCS_PY_COMPOSITE_EXAMPLE

Who Owns What Queries and Reports?

Queries

- **QXX** = When the first three characters of the query are QXX (where XX is the pillar acronym) the query is owned and maintained by Data Services.

- **CTC** = Now owned by Data Services. Historically, some “CTC_” queries were owned and warrantied by Ciber, but others were developed by functional project staff.

- **Not QXX or CTC (DELIVERED)**– if the query does not begin with any of these prefixes, then it is a delivered query and is owned by Oracle.

Financial Aid Queries

- **CTC_FA** = When the first five characters of a query are CTC_FA the query is owned by the SBCTC Financial Aid Support Team.

- **All Financial Aid queries, both new query requests and modifications of existing queries, need to be approved by the SBCTC Financial Aid Support Team.**
Reports

- **BXX, PGXX** = Reports that begin with BXX or PGXX (where XX is the pillar acronym) the query is owned and maintained by Data Services. nVision reports do not have a designated character prefix due to the limited character amount for the name. There are no delivered nVision reports from which we would need to differentiate our custom reports.

- **CTC_CUSTOM** = Developed reports in menu CTC_CUSTOM were originally created by Ciber. They are now owned and maintained by Data Services.

- **Not BXX, PGXX, CTC_CUSTOM (DELIVERED)** = if the report does not begin with any of these prefixes, then it is a delivered report and is owned by Oracle. The exception to this would be for nVision reports as explained above.

Query Maintenance

The SBCTC Data Services Reporting Team will annually work on query clean-up during the month of August. Queries that have not been run in one year will be moved to the ARCHIVE folder. Queries that have resided in the ARCHIVE folder for one year and were still not run (totaling two years without being used) will be deleted.
## Links Provided in this Document

<table>
<thead>
<tr>
<th>Commonly Used Tables Campus Solutions</th>
<th><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/cs-common-tables-for-reporting.xlsx">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/cs-common-tables-for-reporting.xlsx</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonly Used Tables Finance</td>
<td><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/fin-common-tables-for-reporting.xlsx">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/fin-common-tables-for-reporting.xlsx</a></td>
</tr>
<tr>
<td>Commonly Used Tables Human Capital Management</td>
<td><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/hcm-common-tables-for-reporting.xlsx">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/hcm-common-tables-for-reporting.xlsx</a></td>
</tr>
<tr>
<td>metaLink Webpage</td>
<td><a href="https://dataservicesmetalink.sbctc.edu/">https://dataservicesmetalink.sbctc.edu/</a></td>
</tr>
<tr>
<td>Prompt Tables to Use</td>
<td><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/prompt-tables-to-use.pdf">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/prompt-tables-to-use.pdf</a></td>
</tr>
<tr>
<td>PSChrome Extension</td>
<td><a href="https://google.com/chrome/webstore">https://google.com/chrome/webstore</a></td>
</tr>
<tr>
<td>Query Folder List per Pillar</td>
<td><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/pillar-folder-lists.pdf">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/pillar-folder-lists.pdf</a></td>
</tr>
<tr>
<td>Query Migration Request Form</td>
<td><a href="https://www.sbctc.edu/colleges-staff/collegeaccess/resources/dataservices/query-migration-request-form.pdf">https://www.sbctc.edu/colleges-staff/collegeaccess/resources/dataservices/query-migration-request-form.pdf</a></td>
</tr>
<tr>
<td>Structure for Query Manager Access</td>
<td><a href="https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/structure-for-query-manager-access.pdf">https://www.sbctc.edu/resources/documents/colleges-staff/dataservices/peoplesoft-ctclink/structure-for-query-manager-access.pdf</a></td>
</tr>
<tr>
<td>Training Course for All Users - How to Use metaLink</td>
<td><a href="https://sbctc.instructure.com/enroll/NRJMYK">https://sbctc.instructure.com/enroll/NRJMYK</a></td>
</tr>
<tr>
<td>Training Course for End Users - Reporting Course</td>
<td><a href="https://sbctc.instructure.com/enroll/MNKCBJ">https://sbctc.instructure.com/enroll/MNKCBJ</a></td>
</tr>
<tr>
<td>Training Course for Query Developers - ctcLink PeopleSoft Query 101 Basics</td>
<td><a href="https://sbctc.instructure.com/enroll/B9KP6P">https://sbctc.instructure.com/enroll/B9KP6P</a></td>
</tr>
<tr>
<td>Training Course for Query Developers - ctcLink PeopleSoft Query 201 Intermediate</td>
<td><a href="https://sbctc.instructure.com/enroll/DMWB7K">https://sbctc.instructure.com/enroll/DMWB7K</a></td>
</tr>
</tbody>
</table>