cadence®

Allegro® EDM
Report Generator User Guide

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Contents

Preface

About This Guide

The *Allegro® EDM Report Generator User Guide* explains how to create reports of parts in the Allegro Engineering Data Management (EDM) component database, based on property values on parts and related models.

Typographic and Syntax Conventions

This list describes the syntax conventions used for this user guide:

`literal`	Nonitalic words indicate keywords that you must enter literally. These keywords represent command (function, routine) or option names.
`argument`	Words in italics indicate user-defined arguments for which you must substitute a name or a value.
|	Vertical bars (OR-bars) separate possible choices for a single argument. They take precedence over any other character.
`[ ]`	Brackets denote optional arguments. When used with OR-bars, they enclose a list of choices. You can choose one argument from the list.
`{ }`	Braces are used with OR-bars and enclose a list of choices. You must choose one argument from the list.

1

Getting Started with Report Generator

Overview

Allegro EDM Report Generator is a utility that allows you to create reports of parts in the Allegro EDM component database, based on property values on parts and related models, as well as on the property values on the relationship between them.

This utility is primarily used to generate report of parts used in a design and shopping carts with information for those parts accessed from the Allegro EDM component database. For example, you can generate a report that contains the PPL name of all the parts instantiated in a design, or a report of all EOL parts in your design, or parts that have a changed lifecycle status in an Allegro EDM project.

Note: Report Generator can be used with Design Entry HDL and System Connectivity Manager projects. It is not supported for Allegro System Capture projects.

Report Generator contains some default templates called *Public* queries. You can customize these templates to create your own queries. These are called *User* queries.

Report Generator allows you to do the following:

- Generate reports from queries
- Create new user queries
- Modify the existing user queries

Using Report Generator

To identify the various options of the Report Generator utility, do the following:

1. Open the Allegro EDM prompt, that is also referred to as Allegro EDM System Console.
2. Run the `reportgen` command.

   The following four options are displayed:

- `reportgen -gui`
- `reportgen -query <query name> [public | private] -outfile <file path> [-proj <project cpm path> | -shopcart <shoppingcart xmlfile path>]`
- `reportgen -listquery [public | private] [-outfile <file path>]`
- `reportgen -help`

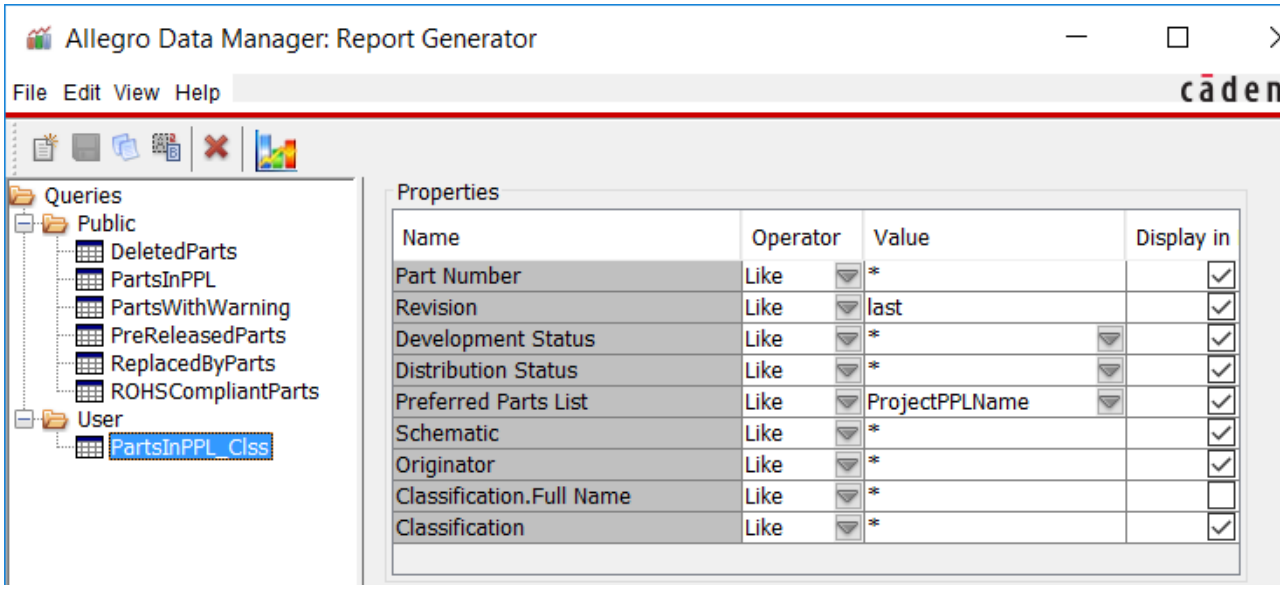
Report Generator GUI

To create a query or modify an existing query, do the following:

1. Open the Allegro EDM system console.
2. Run the `reportgen` command with the following option:

   ```
   reportgen -gui
   ```

When you run this command, the Report Generator window opens.



The various elements of the Report Generator UI are:

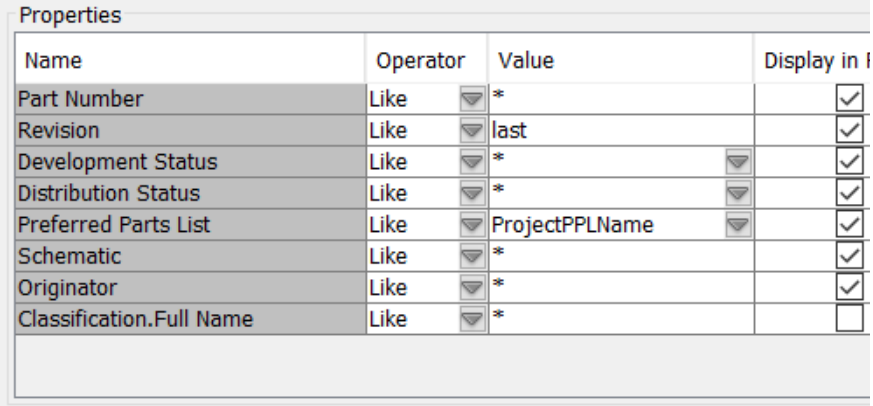
GUI Elements	Description
Menu Bar	The menu options are: *File – New*: to create a new query *File – Save*: to save a query *File – Copy As*: to create a copy of an existing query *File – Rename*: to rename a query *Exit*: to close the Report Generator window *Edit – Delete*: to delete a query *View – Report*: to generate and view the report *Help – Documentation*: to view the help start page *Help – Web Resources*: to access various online resources
Toolbar	The toolbar contains buttons for the various menu options.
	Click this icon to create a new query.
	Click this icon to save a query.
	Click this icon to create a copy of an existing query.
	Click this icon to rename a query.
	Click this icon to delete a query.
	Click this icon to generate and view a report.

Queries (Left pane)	The left pane has the following two sections: ■ Public queries: This section contains the list of Cadence-supplied query templates. The public queries are accessed from the following locations: ❑ Installation: `<Cadence installation_directory>\tools\pcbdw\cae_tools\ReportGenerator\adwreports` ❑ Site: `<ADW_CONF_ROOT>\<company>\<site>\adwreports` If there is query with the same name at the installation and site, the site level query is displayed. ■ User queries: This section contains the queries that you have created. These queries are saved at the following location: *<user_home>*\adwreports

Properties (Right pane)

You can create query templates by adding properties in the right pane. The grid on the right pane contains the following columns:

- **Name**: Used to specify the part property name, related model name or name of a property for the related model. For example, *Part Number* is a property on the part, and *Footprint.HEIGHT* is a property of Footprint models.



  Ensure that you add the *Part Number* and *Revision* properties with `last` as the value so that the report displays the results corresponding to the latest version of the part.

  Note: You cannot add second-level related model names and their properties. For example, *Manufacturer* for a *Manufacturer Part* or Datasheet linked to a *Manufacturer Part* cannot be listed using Report Generator.

- **Operator**: Contains the various relational operators represented as a string. For details of each operator, see Relational Operators Used in Report Generator.

- **Value**: Used to specify the value of the property.

- **Display in Report**: Used to specify whether or not you need a particular property to appear in the generated report.

  If you do not select this option, this property will only be used to search the data but will not appear in the report.

	Click this icon to add a property.
	Click this icon to delete a property.
	Click these icons to move the position of a property name up or down in the order.
	Click this icon to reset the currently specified search criteria.

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Queries

Working with Queries

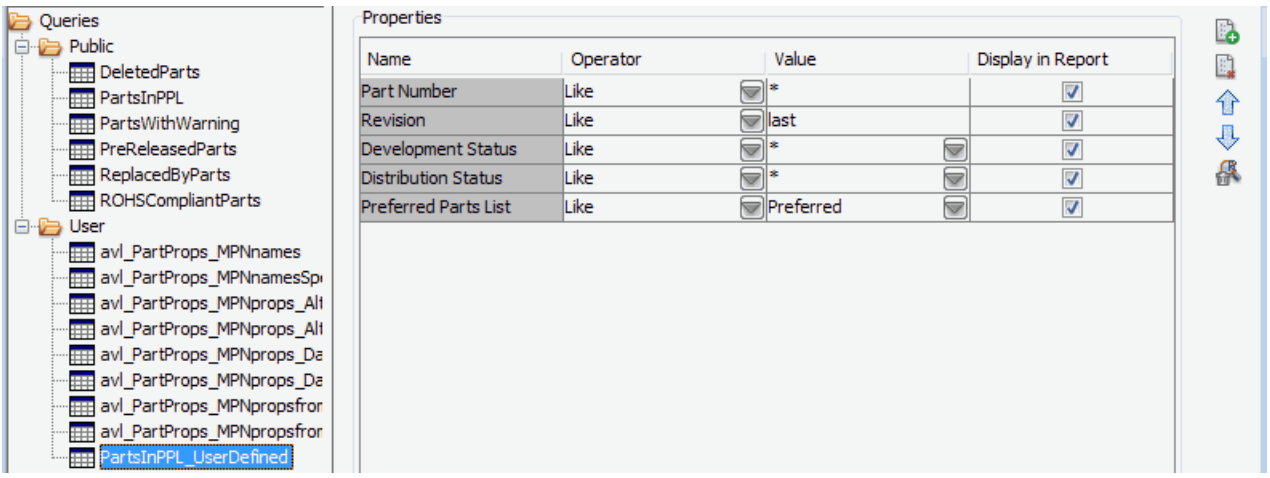
This chapter describes the tasks that you can perform using the Report Generator interface:

- Running a Query
- Creating a User Query
- Modifying a User Query
- Copying a Query as User Query

Running a Query

To run a query, do the following:

1. Open the Report Generator window.
2. Choose a query from the left pane.



3. Specify the search criteria in the right pane if you have selected a user query.

Note: Ensure that the properties *Part Number* and *Revision* with value `last` are added to display the results corresponding to the latest version of the part.

4. Save the query.
5. Choose *View – View Report*, or click the View Report button ().

   The View Report dialog box appears. It contains the following three options based on which you can generate the report:

   - Project
   - ShoppingCart
   - Library

6. Choose the required option.

   Click *Browse* to specify the project path or shopping cart path if you have selected *Project* or *ShoppingCart*.

7. Click *Continue*.

   The report appears in the CSV format.

   To see the list of parts that are used in the design but are missing in the database, navigate to `<user_home>\.adw\reportgen\reportgen.log`.

8. Save the report at the desired location.

Important

Ensure that you save the CSV file because if you close the CSV file and exit Report Generator, this file is deleted from `<user_home>\.adw\reportgen`.

Creating a User Query

To create a user query, do the following:

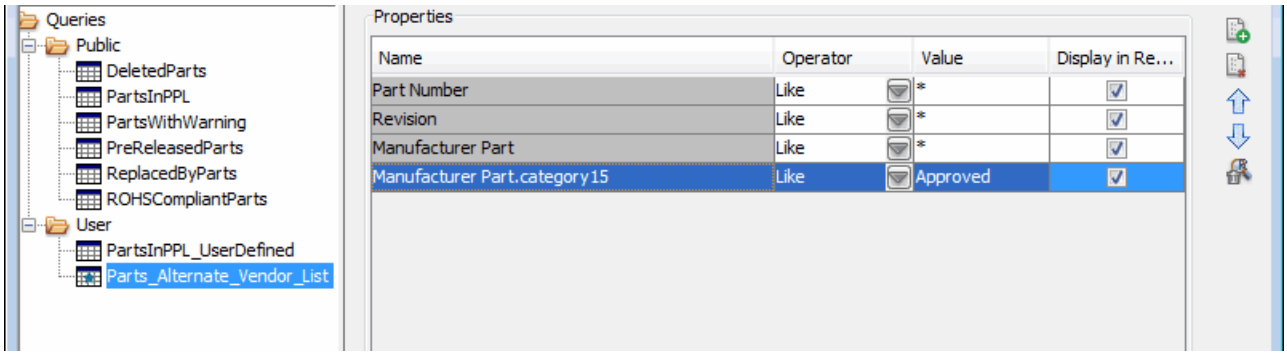
1. Open the Report Generator window.
2. Do one of the following:
   - Choose *File – New.*
   - Click the New button ().
   - Right-click *Users* in the left pane, and choose *New*.

The New Query window appears.

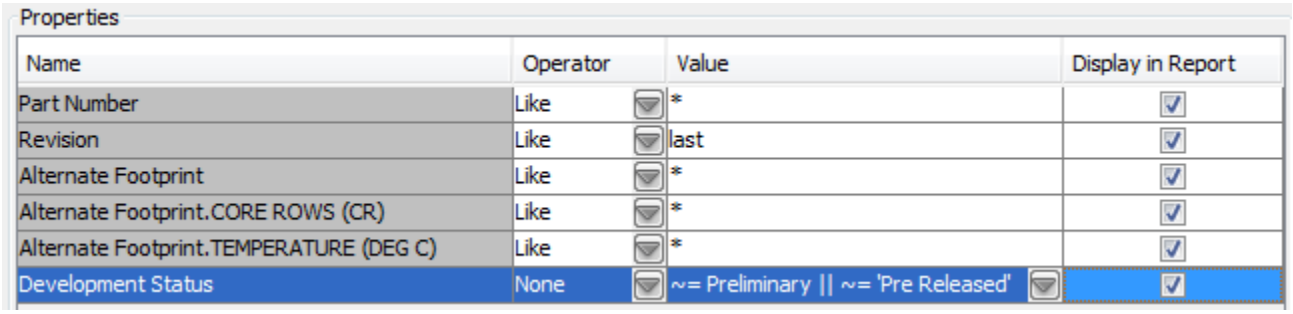
3. Specify a name for the new user query.
4. Click *OK*.

   This query appears in the left pane under the *Users* section.
5. Specify the search criteria for each property row.

   For example, the following figure shows a user query to generate a report that contains a list of corporate parts that have associated manufacturing parts with a specific property value.



Note: If you want to combine more than one value for a report, you can type both values in the Value field. For example, the values for Development Status could be: `~= Preliminary || ~= 'Pre Released'`



6. Save the query.

Modifying a User Query

To modify a user query, do the following:

1. Open the Report Generator window.

2. Choose a user query from the left pane.
3. Modify the search criteria in the right pane.
4. Save the query.
5. Choose *View – View Report*, or click the View Report button ().

   The View Report dialog box appears. It contains the following three options based on which you can generate the report:

   - ❑ Project
   - ❑ ShoppingCart
   - ❑ Library

6. Choose the required option.

   Specify the project path or shopping cart path if you have selected *Project* or *ShoppingCart*.

7. Click *Continue*.

   The report appears in the CSV format.

   To see the list of parts that are used in the design but are missing in the database, navigate to `<user_home>\.adw\reportgen\reportgen.log`.

8. Save the report at the desired location.

Important

Ensure that you save the CSV file because if you close the CSV file and exit Report Generator, this file is deleted from `<user_home>\.adw\reportgen`.

Copying a Query as User Query

To create a copy of an existing query, do the following:

1. Open the Report Generator window.
2. Right-click a query from the left pane.
3. Choose *Copy As*.

   The Copy As window appears.

4. Specify the name of the copied query.

5. Click *OK*.

   The copied query with the specified name appears in the left pane under the *Users* section.

6. Modify the search criteria, if required.

7. Save the query.

8. Choose *View – View Report*, or click View Report button ().

   The View Report dialog box appears. It contains the following three options based on which you can generate the report:

   - *Project*
   - *ShoppingCart*
   - *Library*

9. Choose the required option.

   Specify the project path or shopping cart path if you have selected *Project* or *ShoppingCart*.

10. Click *Continue*.

    The report appears in the CSV format.

    To see the list of parts that are used in the design but are missing in the database, navigate to `<user_home>\.adw\reportgen\reportgen.log`.

11. Save the report at the desired location.

Important

Ensure that you save the CSV file because if you close the CSV file and exit Report Generator, this file is deleted from `<user_home>\.adw\reportgen`.

Viewing Reports

You need to configure the `app-config.xml` file for Report Generator to open the report in the CSV format. To configure the XML file, do the following:

1. Launch Allegro EDM Configuration Manager.
2. Click *Set up or Manage Company & Site.*

   The *Set up or Manage Company & Site* tab appears.
3. On the left tree panel, choose *Allegro EDM Conf Root – <company> – <site> – app-config.xml*.
4. Configure the following entry of the *Editable File* section according to the operating system:

Operating System	Configuration
Windows (Configured by default)	`<mime ext="csv" tool="excel" type="application/excel"/>`
Linux	`<mime ext="csv" tool="ooffice" type="application/excel"/>`

Command Line Options

You can also list the query templates and generate reports using the Allegro EDM system console.

Listing Queries

To list all the existing query templates, run the `reportgen` command with the following option:

```
reportgen -listquery [public | private] [-outfile <file path>]
```

Use this syntax to generate a list of existing queries. The following table explains the parameters used in this command.

Table 2-1 Parameters of List Query Command

Parameter	Explanation
`-listquery`	Parameter in the query.
`[public | private]`	This is an optional parameter. Public specifies if you want to list the queries available at the installation level or site level Private specifies if you want to list the queries available at the user home. If you do not specify this parameter, the result includes queries both at the public and private level.
`[-outfile <file path>]`	This is an optional parameter. The parameter is to get the list of queries in a file rather than at the Allegro EDM system console.

Generating Reports

To generate a report using the Allegro EDM system console, use the `reportgen` command with the following option:

```
reportgen -query <query name> [public | private] -outfile <file path>
[-proj <project cpm path> | -shopcart <shoppingcart xmlfile path>]
```

Use this syntax to generate a report from an existing query. The following table explains the parameters used in this command.

Table 2-2 Parameters of Generate Report Command

Parameter	Explanation
`-query`	Parameter of the command.
`<query name>`	Name of the existing query that you want to run.
`[public | private]`	This is an optional parameter that defines the scope for query to run. Public defines if the query to be run is: A read-only query At the installation or site level If there is a query with the same name at both installation and site level, the query at the site level is run to generate the report. Private defines if the query to be run: is user-defined can be modified by the user If you do not specify this parameter and there is a query with the same name at both public and user level, the query at the user level is used to generate the report.
`-outfile`	Parameter of the command.
`<file path>`	Specifies the complete file path to the report being generated in the CSV format. For example: `D:/output/report.csv`

Table 2-2 Parameters of Generate Report Command

Parameter	Explanation

`[-proj <project cpm path> | -shopcart <shoppingcart xmlfile path>]`	This is an optional parameter.
	If you do not specify this parameter, the query runs on the Allegro EDM component database.
	If you need to run the query on a project, specify the project path as:
	`-proj <project cpm path>`
	If you need to run the query on a shopping cart, specify the shopping cart path as:
	`-shopcart <shoppingcart xmlfile path>`

A

Valid Operators

Operators are used to specify the search criteria for a property. The following table lists the various relational operators and their purpose.

Table A-1 Relational Operators Used in Report Generator

Operator Name in String Format	Operator in Symbolic Format	Purpose and Example
Like	~~	Used for a case-insensitive string match. If you do not select any operator, this operator is used as the default operator. Asterisk and question mark characters in a string (* or ?) are considered wildcard operators. For example: ~~ a*Z is a valid search criteria string. It will list all strings starting with ‘a’ or ‘A’ and ending with ‘z’ or ‘Z’, such as aSdZ, AsvaDz, aSasdz, and AsDZ.
Not Like	!~~	Case-insensitive string used to exclude rows which match the criterion followed by the LIKE operator Asterisk and question mark characters in a string (* or ?) are considered wildcard operators. For example: !~~ a*Z will match all strings not starting with ‘a’ or ‘A’, or not ending with ‘z’ or ‘Z’, such as SdsZ, dsvaDz, aSsady, and AsDY.

Table A-1 Relational Operators Used in Report Generator

Operator Name in String Format	Operator in Symbolic Format	Purpose and Example
Equals	==	Used for case-sensitive exact string match. Asterisk and question mark characters in a string (`*` or `?`) are not considered wildcard operators but string characters. For example: ==a*Z will match one of the strings, a*Z, A*Z, a*z, or a*Z.
Not Equals	!=	Used for case-sensitive exact string not match. Asterisk and question mark characters in a string (`*` or `?`) are not considered wildcard but string characters. For example: !=a*Z will match all strings other than the strings a*Z, A*Z, a*z, or a*Z.
Greater Than	>	Used to search for values greater than the specified value.
Greater Than or Equals	>=	Used to search for values that are greater than or equal to the specified value.
Less Than	<	Used to search for values that are less than the specified value.
Less Than or Equals	<=	Used to search for values that are less than or equal to the specified value.

Using Relational Operators with Wildcard Operators

In the *Value* column, you can use the following wildcard operators to specify search criteria.

Table A-2 Relational Operators with Wildcard Operators

Wildcard Operator	Symbol	Usage
Asterisk	*	Specifies any number of character matches. For example: If `CDN-C*` is the value of the search criteria for the Part Number property, Report Generator will match all the parts whose Part Number value starts with `CDN-C`.
Question Mark	?	Specifies exactly one character match. For example: If `CDN-C???` is the value of the search criteria for the Part Number property, Report Generator matches all the parts whose Part Number value starts with `CDN-C` and ends with any three other characters.

Using Relational Operators with Logical Operators

In the *Value* column, you can use the following logical operators along with relational and wildcard operators to define the search criteria.

Table A-3 Relational Operators with Logical Operators

Logical Operators	Symbol	Usage
Logical AND	&&	Used to specify that both, the first criteria, and the second criteria must be satisfied. For example: ~~a* && ~~*z will match all strings that start with characters ‘a’ or ‘A’ and all strings that end with characters ‘z’ or ‘Z’.

Table A-3 Relational Operators with Logical Operators

Logical Operators	Symbol	Usage
Logical OR	||	Used to specify that either of the search criteria should be satisfied. For example: ~~a* || ~~b* will match all strings that start with characters ‘a’, ‘A’, ‘b’, or ‘B’.