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# **Contents**

<u> Preface</u> 5	;
 <u>About This Guide</u>	
Typographic and Syntax Conventions	
rypographic and Gymax Gomeonions	•
1	
·· Cotting Ctortod with Donort Congretor	
Getting Started with Report Generator	
<u> Overview</u>	
<u> Jsing Report Generator</u>	7
Report Generator GUI	3
<u>2</u>	
	}
Working with Queries	
•	
Running a Query	
Creating a User Query	
Modifying a User Query	
Copying a Query as User Query	
Viewing Reports	
Command Line Options	
<u>Listing Queries</u>	
Generating Reports	)
_	
<u>A</u>	
Valid Operators 23	3
Using Relational Operators with Wildcard Operators	
Using Relational Operators with Logical Operators	

# **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:

Getting Started with Report Generator

- ☐ reportgen -gui
- ☐ reportgen -listquery [public | private] [-outfile <file path>]
- □ reportgen -help

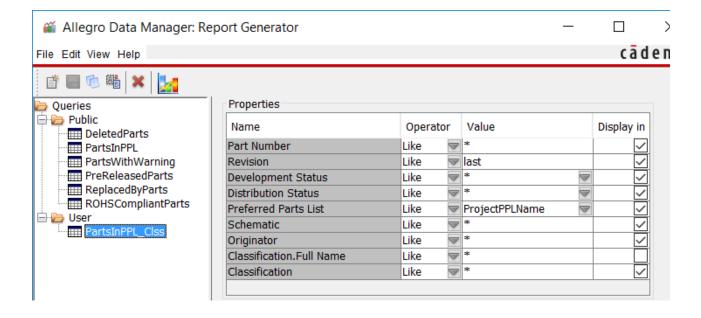
# **Report Generator GUI**

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.



Getting Started with Report Generator

The various elements of the Report Generator UI are:

<b>GUI Elements</b>	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.
ľ	
_	Click this icon to save a query.
	Click this icon to create a copy of an existing query.
0	
	Click this icon to rename a query.
® <mark>®</mark>	
	Click this icon to delete a query.
×	
	Click this icon to generate and view a report.

Getting Started with Report Generator

#### Queries (Left pane)

The left pane has the following two sections:

Public queries: This section contains the list of Cadencesupplied query templates.

The public queries are accessed from the following locations:

- Installation: <Cadence
  installation\_directory>\tools\pcbdw\c
  ae\_tools\ReportGenerator\adwreports
- □ Site:
   <ADW\_CONF\_ROOT>\<company>\<site>\adw
   reports

If there is query with the same name at the installation and site, the site level query is displayed.

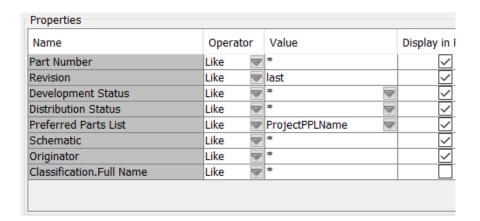
■ User queries: This section contains the queries that you have created. These queries are saved at the following location: \adwress{adwreports}

Getting Started with Report Generator

#### 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.

Getting Started with Report Generator

	Click this icon to add a property.
	Click this icon to delete a property.
û U	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.
8	

2

# **Queries**

# **Working with Queries**

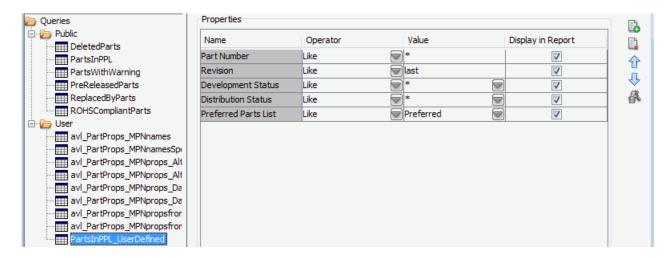
This chapter describes the tasks that you can perform using the Report Generator interface:

- 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.

Queries

**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 ( 2 ).

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.

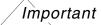
Click *Browse* to specify the project path or shopping cart path if you have selected *Project* or *ShoppingCart*.

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.



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 ( < ).</p>
  - □ Right-click *Users* in the left pane, and choose *New*.

Queries

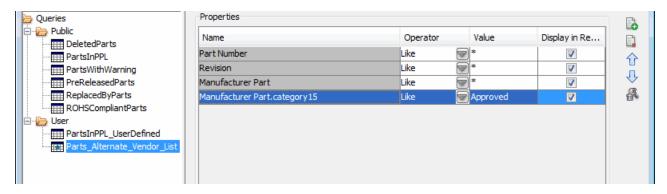
The New Query window appears.

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

This query appears in the left pane under the *Users* section.

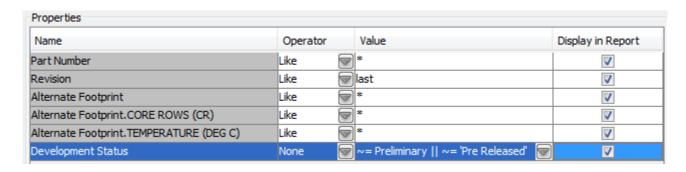
**5.** Specify the search criteria for each property row.

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.

Queries

<ol><li>Choose a user query from the left pa</li></ol>	ιne.
--	------

- **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.

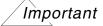
Specify the project path or shopping cart path if you have selected *Project* or *ShoppingCart*.

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.



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.

Queries

#### 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 ( **3**).

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 \.adw\reportgen.

Queries

# **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)	<pre><mime ext="csv" tool="excel" type="application/ excel"></mime></pre>
Linux	<pre><mime ext="csv" tool="ooffice" type="application/ excel"></mime></pre>

# **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.	
<pre>[-outfile <file path="">]</file></pre>	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.	

Queries

#### **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=""></query>	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=""></file>	Specifies the complete file path to the report being generated in the CSV format.	
	For example: D: /output/report.csv	

Queries

**Table 2-2 Parameters of Generate Report Command** 

Parameter	Explanation	
[-proj <project cpm="" path="">   - shopcart <shoppingcart path="" xmlfile="">]</shoppingcart></project>	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=""></project>	
	If you need to run the query on a shopping cart, specify the shopping cart path as:	
	-shopcart <shoppingcart path="" xmlfile=""></shoppingcart>	

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.

Valid Operators

**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.

Valid Operators

#### **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'.

Valid Operators

**Table A-3 Relational Operators with Logical Operators** 

Logical Operators	Symbol	Usage
Logical OR	II	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'.